



# JOURNAL

OF

## THE ASIATIC SOCIETY.

No. 47.—November, 1835.

I.—Notes taken by Captain C. M. WADE, Political Agent at Ludiána, in 1829, relative to the Territory and Government of Iskárdoh, from information given by CHARÁGH ALI, an agent who was deputed to him in that year by AHMAD SHÁH, the Gelpo or ruler of that country.

[Read at the Meeting of the 4th November.]

[In publishing the accompanying memoir, we have purposely not availed ourselves of the permission given us by the author, to omit the copies of his correspondence with the Gelpo of Iskárdoh, because the dates of these letters establish the fact of Captain WADE's attention having been drawn to the traditionary history of this place in 1829, previous to the information acquired in Lieut. BURNES' travels that appeared in our second volume. In 1831, Captain WADE urged M. JAQUEMONT to push his way into little Tibet, as may be seen by a remark in his letters, and the deputation from the ruler of Iskárdoh therein described, consisted of the same individuals whom our author interrogated at Ludiána. Mr. VIGNE, an English traveller, is now on his way to little Tibet, and will doubtless clear up the important question suggested to the native ruler by MOORCROFT, whose own papers probably contain some speculations on the subject. (See also CSOMA DE KÖRÖS's note on the geography of Tibet, J. A. S. vol. i. 121, and BURNES' note, ii. 306.)—ED.]

### PRELIMINARY CORRESPONDENCE.

From AHMAD SHA'H, the Gelpo or ruler of Iskárdoh (capital of little Tibet), to Captain C. M. WADE, Political agent at Ludiána.

After Compliments,

Sometime ago Mr. MOORCROFT came towards my country\*, and by his friendly disposition and great kindness, sowed the seeds of a lasting friendship in my heart.

Adverting to the general rule and practice which the English observe of making a friend of every stranger, and that, please God, they will never alienate themselves from one with whom they are already connected; on hearing the news of your auspicious approach (Captain WADE's first mission to the Panjáb in 1827, from Earl AMHERST, the Governor General of India,) I wrote to you and sent you a message; but my letter was intercepted on the way by my enemies, and prevented from reaching its destination†.

\* Mr. MOORCROFT opened a correspondence with AHMAD SHA'H from Ladákh, but did not visit Iskárdoh.

† The letter of which a translation is now given was brought by way of Kolu. It was folded in the size and shape of a rupee, and was enclosed in a piece of leather and worn as an armlet to elude discovery; the Sikhs and the people of Ladákh both

Several letters addressed to me by Mr. MOORCROFT, are in my possession, and I bear his communications in my mind. I would send you one of his letters, but I regard them as sacred relics, and do not like to part with any one of them, lest it might fall into the hands of malevolent enemies on the way. The following is a passage from one of the letters which I received from him: "It is supposed that ALEXANDER the GREAT came to Iskandariá, and that some vestige of him is still to be found there. In that event, is it in the form of arms or weapons, or hooks; and if hooks, are they in the Persian or Grecian language\*." He gave me at the same time some kind and considerate counsels. I was not then aware of any vestiges, and Mr. MOORCROFT departed on his journey. After some research I have ascertained that there is a part of the foundation of an old dilapidated fort, which was destroyed by fire. If there should be any thing, it will probably be found beneath these ruins. God knows. Let me recommend you therefore to depute an intelligent gentleman of your own tribe, who will be able to satisfy himself by personal inquiry on every subject, as well as on the existence or otherwise of the Macedonian relics that are supposed to be here.

There was a report, that Mr. MOORCROFT was desirous of finding a way to Yarqand; but his scheme was frustrated by the intrigues of the people of Ladakh. If you have the same design, there is a passage to Yarqand through my country, which is available to you if you please. Consider my humble roof as your own.

Do not fail to despatch some one on your part. I am anxiously waiting to receive him. Although it is like the ant preferring a petition to SOLAIMAN, there is no impropriety in making an application, and I trust that you will not withdraw your hand from the request of the petitioner.

I suspect that some vestiges of ALEXANDER the GREAT are likely to be discovered beneath the foundation; but God knows whether there are any or not.

*From Captain WADE to AHMAD SHA'H, dated the 22nd of August, 1829.*

After Compliments,

I have been delighted by the receipt of your friendly letter, transmitted by the hand of CHARA'GH ALI SHA'H, your agent. The perusal of it afforded me the highest gratification in the glad tidings that it conveyed of your health and happiness. What you write regarding the journey of Mr. MOORCROFT in your direction, and that he cultivated amicable relations with you, is very intelligible. It is the duty of the officers of the British Government to consider those who are well affected towards them as their sincere friends, and to attach them by daily increasing ties of unity and friendship.

As I have been engaged on a journey (to Delhi), the dismissal of your agent has been delayed. I now take the first opportunity of giving him his leave to return. On his arrival in your presence, he will communicate to you the sentiments of esteem and regard which you have established in my heart.

Considering me among your well wishers, continue to delight me often by the receipt of your friendly letters.

*From AHMAD SHA'H to Captain WADE.*

After Compliments,

Praise be to God, that by the blessing of his infinite favour, the garden of friendship and unity, watered by his mercy and bounty, is blooming between us, loaded with fragrance and joy.

I offer thanks to the Almighty, that I have had the pleasure to receive your propitious letter by the arrival of my agent CHARA'GH ALI; adverting to the gratifying expressions contained in it, that, it is the rule of the British nation

being supposed to be jealous of the writer's design. There is enmity between AHMAD SHA'H and the chief of Ladakh, and the presence of the Sikhs in Kashmir renders it difficult to maintain a communication by that route without their knowledge.

\* AHMAD SHA'H's agent informed me, that there was a book in his master's possession in a character which no one could read. He described it to be bound in a clasp cover. It is probable, that this book is a Latin Bible, left by some of the Jesuits who visited this part of Asia in the 15th century, and not of any Grecian origin.



to cultivate relations of friendship, and make friends of strangers, and never to alienate themselves from their friends; thank God, that my wish is gratified.

CHARA'GH ALI has delivered to me your message, that you were desirous of receiving intelligence from this quarter as well as of the state of affairs in the neighbouring countries. Immediately on his arrival, I sent one of my people to collect information; but unhappily, he had scarcely reached the midway of his destination, which is two months journey from hence, before he died. I forthwith despatched another person; but he has not yet returned. In consequence I have postponed CHARA'GH ALI's departure to you until his return. If the man whom I have sent come back before the snow begins to fall, CHARA'GH ALI will soon have the honor of presenting himself before you; but if, God forbid, he should not have returned when the winter has commenced, and the road becomes impassable, I will still depute CHARA'GH ALI to you with intelligence of such passing events as may come to my knowledge\*.

I have nothing more to add than to express my hope, that you will not forget to gratify me constantly by tidings of your welfare.

*From Captain WADE to AHMAD SHA'H, dated the 8th of Feb. 1831.*

After Compliments,

The receipt of your friendly letter, at a time when I was very anxious to hear from you, has delighted me beyond measure, and the news which it contained of your health and happiness have afforded me the highest gratification.

I am rejoiced to learn, that you have sent a person to collect intelligence regarding the state of affairs in your quarter, and your intention of communicating the result to me by the hand of CHARA'GH ALI, when your messenger should return. These friendly offices bear ample testimony to your good will towards the British nation. I expect that ere now you will have despatched your agent with intelligence from that quarter. It is evident that there is nothing in the world more exalted than friendship, for the peace and good order of the affairs of mankind depend on it. When its benign influence reigns between different nations, it is especially productive of mutual advantages.

Regard me among your sincere friends, and gratify me often by your friendly communications, as they are a source of great delight to my mind.

*From AHMAD SHA'H to Captain WADE.*

After Compliments,

Praise be to God, that through his blessing, affairs in this quarter at the present date are in a satisfactory state. The mirror of my heart is soiled with no care but the desire of an interview with you, which by the divine favour I hope will soon take place. May success and prosperity attend your tribe.

It must not be concealed, that from the beginning I have been moved by an anxiety beyond bounds to connect myself with the well-wishers and faithful servants of your Government, by ties of friendship, and to identify myself without reserve with their interests. My mind was occupied with these thoughts when Mr. MOORCROFT happily came and resided in my vicinity (Ladakh), where he was delayed for a time from a cause which I have heard, but do not exactly know the secret of the affair. At that period he opened a cordial communication with me by the interchange of friendly letters; after which, I had no opportunity of gratifying my heart's desire. I then despatched CHARA'GH ALI with a letter to you, and had the pleasure to receive one in reply. Although my agent was engaged to return to you soon, his departure has been delayed owing to a circumstance which the bearer will explain. Since that time, I have written several letters successively to you, which do not appear to have reached their destination.

Mean while, M. JAQUEMONT came to Kashmir, and renewed the friendly sentiments which possessed my heart. I deputed CHARA'GH ALI and another person named NA'ZIM to him, and had the gratification of cultivating through them the

\* With the present letter I received a separate paper, containing an account of the recurrence of the insurrection in Eastern Turkistán, which I forwarded at the time to the Secretary to the Governor General, who had received information of the event from the Select Committee at Canton, and was desirous of receiving any intelligence that I might have on the subject.

seeds of friendship with that gentleman. I afterwards addressed several letters to him, which with the exception of one which I despatched by the hand of a man MOHAMDU by name, and to which I had the pleasure to receive a reply, failed to reach him. Since that period, notwithstanding every exertion on my part, I have not been able to renew my correspondence with him.

I have now the felicity to despatch NA'ZIM to you, who, please God, will, on his arrival, mention to you in person every thing connected with me and my affairs. My object is to request that you will depute a confidential agent to me, that I may entrust to him some secrets which I wish to impart. Although the application of an humble individual is considered forward and presumptuous, yet recollecting your kindness, and the reputation which you enjoy with the world for your friendly disposition, I have taken the liberty of communicating my wish to you, and I hope that it will be deemed deserving your consideration, that both parties may be reciprocally benefitted.

*From Captain WADE to AHMAD SHA'H, dated the 22nd of February, 1834.*

After Compliments,

I have been gratified by the receipt of your kind letter at an auspicious moment, when my thoughts were directed towards you. Its arrival has expanded my heart with joy, as it assured me of your health and welfare.

The communications with which you charged your servant NA'ZIM have been delivered to me. What you wrote regarding the feelings of attachment and regard by which you are moved towards my countrymen, I can well appreciate. The fact is, there is nothing more valuable or estimable in the world than friendship, tending as it does to promote the peace and prosperity of mankind. It is particularly conducive to their welfare, when its fruitful influence prevails between different nations. The British Government has a due regard for every one with whom it has any amicable relations. I, as well as the Government which I serve, are aware of your sentiments of attachment and friendship; but as I cannot properly depute a person on my own part, nor answer your questions without the permission of my Government, and the Right Honorable the Governor General, happens at present to be absent on a distant journey (at Utacamund), and the hot season is rapidly approaching, I do not consider it advisable to detain NA'ZIM with me, until I can get a reply from His Lordship. I have therefore dismissed him on his return. He will communicate to you the sincere regard which I entertain for you, while I inform my Government of the contents of your letter, and will let you know hereafter what reply I receive.

Considering me among your sincere friends, continue to gratify me frequently by the receipt of your welcome letters.

---

*Situation.*—Iskardoh is a mountainous country, divided into valleys of various extent. It is situated towards the point where the *Belat Ták* and *Mus Ták* mountains converge and separate the lofty ledges of *Tibet*, from the plains and valleys of *Turkistán*: among the natives it is generally known by the name of *Beldestán*.

*Tradition.*—The tradition is, that ALEXANDER the GREAT came here on an expedition towards *Khatá* or Scythia (modern China), and that the *Koteli Musták*, or the *Musták* mountains, which lie between *Yárgand* and *Khatá*, being at that time impassable, on account of the depth and severity of the snow, the Macedonian halted on the present site of the capital, until a road could be cleared for his passage; when, leaving every part of his superfluous baggage, together with the sick, old, and infirm of his troops behind, in a fort which he erected while there, he advanced against *Khatá*. These relics of the army founded a city, which they named *Iskandariá*, or *Alexandria*, now pronounced *Iskardoh*.

*Extent.*—In length, the territory of *Iskárdoh* is estimated to be a journey of 11 days, and its average breadth about nine days' journey. On the east it is bounded by *Ladák*, which is a journey of 11 days from the capital; and on the west, by *Gilget*, a journey of nine days. *Yárgand* bounds it on the north at a distance of 12 days' journey, and *Kashmír*, on the south, a journey of nine days\*.

*Climate.*—The valleys which intersect the country are warm, but free from the excessive heats of summer; and though cold in many places, partake of a more uniform and temperate climate, than might be inferred from their extreme elevation. During the winter months, the snow lies in the city about three spans in depth. It snows, but never rains. The atmosphere throughout the year is stated to be remarkably dry and clear. On the summits of the neighbouring mountains, the snow is perpetual.

*Vegetable and mineral productions.*—Its vegetable productions are nearly the same, but not so exuberant as those of *Kashmír*. There are a few trees, such as the plane, poplar, and willow, which grow to a considerable size. It produces every kind of fruit peculiar to a cold climate, such as plums, cherries, apricots, currants, walnuts, &c. An oil is extracted from the kernel of the apricot, which is universally used by the people for culinary and other purposes. The country abounds with rhubarb and asafœtida. Among the mineral productions may be named gold, sulphur, arsenic, and *Sohan Makhí*, which are found in the *Shakar* district. In *Revend* also, there are mines of gold, arsenic, crystal, and *Sohan Makhí*; and in the district of *Baraldoh*, there is a sulphur mine, the effluvia of which is so strong as to be suffocating to those who approach it. A stone called *Múrdár Sangh*, said to possess an antipoisonous quality, is found in some places. Forwards, the western extremity of *Shakar*, on the bank of a stream which comes from the *Nagar* territory, there is a hot spring; by bathing a few days in the water of which, persons who are subject to rheumatic affections or cutaneous disorders are sure of being cured, particularly those who are infected with disorders of the latter kind. On the top of the hill, which is situated near this spring, stands a *Chillá* or cell, where the superstitious Muhammedans are in the habit of worshipping the diety in abstraction for 40 days, during which they take no other food than a few grains of barley and the smallest possible quantity of water, consistent with the support of life†. The shrine was built by SHÁH NASIR AMAM SYED KHUSRO. To the north of *Hazúra*, in the

\* A day's journey averages about 15 miles.

† A form of penitence common in other Muhammedan countries.

district of *Duvan*, there is another hot spring, the water of which is so warm that if a drop of it fall on any tender part of the body, it will produce a blister. It rises to a height of  $2\frac{1}{2}$  feet.

*Mountains.*—The territory of *Iskárdoh* lies in the midst of a region of mountains, exceeding in grandeur any in the known world; but depending for a description of the country on the oral evidence of a native, whose limited range of observation renders it difficult for him to convey his knowledge in a manner easily intelligible to an European inquirer; it would be vain to attempt a particular account of the mountainous features of the country\*; much of the information that is now given must partake of the vagueness of the source from which it is derived. Where there is nothing, however, but a complete blank in the latest maps regarding a country which is likely to be interesting to the antiquarian, it seems better to throw even these faint rays of light on its history and geography, than to withhold them altogether, because they may not happen to possess the best claims to accuracy.

*Rivers.*—There are two great rivers, besides several small streams and innumerable springs; one of the rivers has its source in the direction of *Chílú*, and another comes from *Ladúkh*. They unite near the fort of *Karkes*, and then taking their course by *Iskárdoh*, where the united stream, which forms a large river, is called *Gæmsú*. On its passage towards the plains, the same river is known by the name of *Atak*, or *Indus*. When the river rises, it overflows its banks, and spreads below the city to a breadth of 300 paces. Its ordinary width is about 100 paces. There are two boats in use here on the river, the first that are to be seen on the *Indus* in its course through *Tibet*. The other river rises near *Shakar*, and after being joined by the *Saghar* stream, falls into the *Indus* below the fort of *Iskárdoh*. The people from *Chílú* and *Iskárdoh* travel in the winter season by the river *Indus* on ice, and drag their baggage over the frozen surface by ropes.

*Roads.*—A high road leads from *Iskárdoh* to *Yárqand*, merchants travel by it in *qafilás*, but travellers and servants of the Government who go on business, proceed singly, or not, as may suit their convenience. It is crossed by a very lofty range of mountains, which is only passable with safety at a particular season of the year. There is a considerable road also by *Gilget* to *Kunduz*, *Balkh*, and *Bokhára*. The *Usbeks* came to *Gilget* with horses, which they exchange for

\* From the magnitude and variety of streams which flow west and east of the *Belat Tá*k, and *Musták* ranges, it is probable that the mass of mountains which spring from their basis reach their greatest height in the vicinity of *Sirakot*, which is on the north-west frontier of *Iskárdoh*.



gold. Other roads go to *Ladákh*, *Kashmír*, and the territory of the *Yusafzáis*. Between *Iskárdoh* and *Kashmír* there is an extensive *Dasht*, or wilderness, called *Beyarsa*, but by the *Kashmírians*, it is named *Deosu*; towards the southern end of which is a small lake, where travellers alight. The plain is covered with a coarse kind of grass and bushes. There is not a tree to be seen on it. It abounds with bears, and *tabarghan*, an animal which resembles and equals a monkey in size and appearance. A traveller from *Iskárdoh* to *Kashmír* enters the valley of *Kashmír* by the *Khoyameh* pass, which is subject to the authority of the Government of *Kashmír*. *DILÁWAR KHÁN*, the late proprietor of *Khoyameh*, is at present in confinement with the Governor of *Kashmír*, and *SURAJ BHAN*, one of the Pandits of *Kashmír*, has been placed in charge of the district\*. The road to *Ladákh*, passed by *Chilú*, opposite to *Jhoriet*, which lies on the frontier of the *Chílú* district, is the *Teára* province, which forms the western frontier of *Ladákh*. From *Teára* to *Ladákh* is three days' journey eastward. There is a station for levying transit duties on the *Teára* frontier, the collections of which are remitted to the *Ladákh* treasury. From *Teára*, the pass of *Rahara Kharam* is three marches distant, beyond which extend the dominions of the Emperor of China. A regular communication is maintained on the Chinese frontier from one station to another by Chapars or *Suwárs*, instead of foot runners, who convey intelligence with great rapidity.

*Divisions of territory.*—Including the district of *Iskárdoh* itself, there are altogether nine divisions of territory actually subject to *AHMAD SHÁH*, the ruler of that country. Their extent is determined by the limits of the valleys in which they are situated. First, the district of *Baraldoh*, which is held by *SULIMAN KHÁN*, the nephew of the ruler. From *Baraldoh* to the city of *Yárgand* is a journey of eight days. Second, the district of *Parkotah*, in charge of *GHOLAM SHÁH*, his brother. It stands in an open valley, from which issues a road to *Kashmír*, practicable for horses. Third, the district of *Taltí*, which belongs to *AHMAD KHÁN*, his cousin. Fourth, the district of *Kartákhshá*, assigned to *ALI SHER KHÁN*, his nephew. There is a considerable stream between the district of *Kartákhshá* and the fort of *Soet*, situated in *Porakh*, a territory subject to *Ladákh*, and west of *Kartákhshá*; and east of *Soet*, situated also in the

\* There are twelve passes leading into the valley of *Kashmír*. Each of them is held by a Malik, or chief, who is responsible for their safety. The Maliks derive the offices from the Moghals, who granted to them the territory in the immediate vicinity of the passes for their own support, and the pay of the guards necessary to their defence.

*Porakh* territory, there is another stream of nearly the same size. From the limits of *Kartákshá* to *Ladákh*, a light *kasid* can travel in seven days; but a traveller with baggage requires ten days to make the journey. Fifth, the district of *Karkes*, which is held by *YAQUB KHA'N*, one of the *AHMAD SHA'H*'s relations. *Karkes* is bounded on three sides by the *Iskárdoh* district, and on the fourth, or eastern side, by *Chílú*, which was originally included within the government of *Iskárdoh*; but about three years ago, the chief of it, named *MEHDI KHÁN*, revolted and setting the authority of the ruler of *Iskárdoh* at defiance, has entered into an alliance with the "Gelpo" or ruler of *Ladákh*. As the Governor of *Chílú* is married to a niece of *AHMAD SHA'H*, the ruler of *Iskárdoh* is restrained by considerations of delicacy from attacking and reducing him to obedience. The district of *Chílú* lies five days' journey distant to the east of *Iskárdoh*: and from *Chílú*, the *Ladákh* frontier is only one day's journey. Sixth, the district of *Nagar* is situated in the hills, about seven days' journey to the north-west of *Iskárdoh*, and constitutes the *Jagír* of *FÍROZ SHA'H*, a dependent of *AHMAD SHA'H*. From the town of *Nagar* to *Sirakol* is eight days' journey, and from *Sirakol* to *Yárqand* is the same distance. Seventh, the district of *Randoh*, the *Jagír* of *ALÍ KHÁN*, the nephew of *AHMAD SHA'H*, which is reported to be much less elevated than other parts of the country, and the climate and productions to partake of the difference in elevation. It is famous for grapes, and also produces rice, figs, and pomegranates, which are not found in other parts of the country. Formerly, it was subject to the authority of *AHMAD SHA'H*'s ancestors; but it was wrested from them during a period of anarchy by the chief of *Gilget*, in whose possession it now remains. Beyond the fort of *Randoh* a journey of five days' is the territory of *Gilget*, in the possession of *SULIMAN SHA'H*. Eighth, the district of *Hazúra* is the *Jagír* of the son of the ruler of *Iskárdoh*, and is bounded by *Kashmír* on the south.

*City of Iskárdoh*.—The city of *Iskárdoh* appears to be situated in a valley of some extent. It is built on an isolated hill, bounded on two sides by the river *Indus*. From the south, the ascent by the road is about two and a half kos. On the summit of the hill is the fort supposed to have been erected by *ALEXANDER the GREAT*. It is now merely used as a citadel or station for a guard of soldiers. The residence of the ruler, together with some habitations belonging to his relations and dependents, is situated on a projection of the hill about half way from the top. At its base runs the river, and on the other side of the river, about a kos and a half distant, lies another isolated hill, which is called *Barkh Kharah*; beyond which, in the same direction,

to *Baraldoh*, three days' journey from the capital, the country in general is of a level description. To the south of the city there is a plain about seven or eight kos in extent, which is covered with cultivation and gardens. The other two sides of the hill of *Iskárdoh* are chiefly occupied by the population of the city, and the aspect of the country for a day's journey in those directions also is open and well cultivated.

*Fortified places.*—There are several fortified places within the limits of the *Iskárdoh* territory ; some are situated on the frontiers, and others in the interior parts. Every fort has a separate jurisdiction. The fort of *Iskárdoh* has already been described. It is called by the natives *That Iskárdoh* and *Kharpúcheh*, which means the chief fort. At a distance of half a day's journey to the south of *Iskárdoh* lies the fort of *Shakar*. *Shakar* is the chief town of any note in the province next to *Iskárdoh*. It is situated in a narrow and well-cultivated valley, about 13 miles long. The hill itself is about 500 paces high. There are several hills in its vicinity but none of the same height. The fort is supplied with water from the foot of the hill. There is a stream running through the valley of *Shakar*, from the bed of which the people collect gold, the quality of which is stated to be superior to that which is found in any other part of the country. At the eastern end of this valley is a hot spring, where the Gelpo has formed a residence, to which he occasionally resorts. *Kartakhshá* is also a fort of some note. It is situated on the Indus, in the vicinity of some high hills. The country about it is said to be rugged and difficult, and the fort itself to be a place of some strength and importance, from its situation on the *Ladák* frontier.

*Population, character, and habits of the people.*—No correct estimate can be formed of the population of the country. It is said to amount to three lakhs of families, which in all probability greatly exceeds the actual number. The people are divided into several different tribes, but they are generally known by the name of Baldi. Among them there is a tribe called Kerah, the members of which are enjoined by their religious laws to follow four ordinances, viz. first, to destroy their female infants ; second, not to tell falsehoods ; third, not to desert their party in the day of battle ; fourth, not to slander any one. The natives are described to be of a phlegmatic disposition, like other Tibetan tribes\*. They are a stout, well-made race of people, with ruddy complexions and good features ; but have

\* Asiatic physiologists maintain the opinion, that the temperament of man is affected by the nature of the animal or vegetable production on which he feeds ; and the phlegmatic character of the inhabitants of little Tibet is accordingly ascribed to barley, millet, and fruits, being their chief articles of food.

little hair on their body, and scarcely any beard. It is said, they are deficient in enterprise, and of a treacherous and designing disposition. Barley, wheat, and flesh are the chief articles of food; rice is not generally used. All those who can afford it are in the habit of drinking tea at their breakfast, and in the course of the day, it is usual with them, as with their neighbours of *Ladák*, to greet their visitors with a cup of tea. The use of this luxury is becoming more general than it was, though it bears a high price. There is little variation in the dress of the people from their neighbours of *Ladák*. The wealthy classes generally wear *qábas*, (a kind of coat, with skirted margin all round,) and caps, &c.; while the dress of the peasantry consists of *jamahs*, (another kind of coat, formerly much used in India.) It resembles the vest worn by the Indian dancing girls, and is made of *pattú*, which is manufactured both of a coarse and fine quality, from goat's wool. They wear caps of the same stuff\*. Cotton is not produced here. It is imported from *Yárqand* to *Kashmír*, but very few people shew a desire to wear cotton clothes. Their houses are mostly made of layers of stones and wood, with flat roofs, and are two or three stories high, with far projecting roofs, somewhat similar to those on the southern face of the *Himálaya* range.

*Religion, language, and means of exchange.*—The common religion of the people is Muhammedan, of the Shia sect, and the followers of the *IMÁM JÁFAR*; but towards *Gilget*, there is a race of people which does not seem to possess any well-defined religious system: some of them are idolators, and worship trees; while others, like the *Hindús*, do not eat the flesh of kine, and yet profess to be Muhammedans. Tibetan is the common language of the country, but the people have no books in it. They are beyond the influence of the *Lámas*, and receive their education, which is exclusively confined to the chiefs and priesthood, in Persian. They have no system of coinage in the shape of rupees, pice, or kourís. The only means of exchange known among them is in small pieces of unwrought gold, which is found in the country both in mines and in the beds of rivers.

*Government, military establishment, and revenue.*—The government of *Iskárdoh* is absolute, but the ruler *AHMAD SHÁH*, who claims his descent from *JOSEPH* the prophet of the Israelites, is mild and benevolent; his title is *Erg* *mayúm*, signifying the Lord of the mountains; but among his people he is called “*Gelpo*,” or king, and his tributaries and petty chiefs, *Ju*. He usually resides in the fort of *Iskárdoh*. It

\* It is not customary to milk the goat in this country, which is supposed to add to the softness of the wool.



is asserted, that the dynasty of the present ruler has been in uninterrupted possession of the country for the last 14 generations. He does not owe allegiance to any foreign state, being subject to none in tribute or service; but the Sikhs have attempted to extend their conquests beyond *Kashmír* in that direction, which has tended to excite his alarm and jealousy. There is no standing army; the troops of AHMAD SHÁH consist of his vassals. They are landed proprietors, who receive no regular pay, but are exempted from taxation in requital of military service. Whenever an exigency occurs to render the collection of a force necessary, the ruler calls out the peasantry of the country, and forms them into a sort of militia. He provides them with arms and ammunition, so long as they may be kept embodied; and when the occasion for their services is over, they are disarmed and dismissed. The revenue of the state is collected in kind in the following form:—one kharwár of wheat, one of barley, and one of mustard or millet are levied from each landholder. Some of the zemindars pay their rents in one kharwár of ghí each, instead of the other three articles. A kharwár is about 40 seers in weight.

*Extension of Sikh conquests in the direction of Iskárdoh.*—Lying between *Kashmír* and *Iskárdoh*, there is a small territory called Kathaí. About seven years ago, KIRPÁ RÁM, the Governor of *Kashmír*, sent a force of 500 men to erect a fort there. The *Muzaffarábád* chief, of whom it was subject, opposed the design; but KIRPÁ RÁM persisting in his object, an action ensued, in which the Sikhs were defeated, 200 of them were killed and wounded, and the rest taken prisoners, who were converted to Muhammedanism. After the action, the chief of *Muzaffarábád* advanced to *Bará mulá*, and reduced the Sikhs to take refuge in the fort at that place; but he was soon obliged to retire. The Sikhs being reinforced, renewed the attack, and ultimately established their authority in Kathaí.

*Connexion with the Chinese frontier.*—The northern limits of *Iskárdoh* are connected with the Chinese frontier. There are known to be three great tribes among the people of *China*: one of them is called Manchu, from which the royal family is descended; another *Kara Khatai*, (implying black-colored,) which inhabits the eastern part of the *Chinese* empire; the third, *Tingani*: these are Muhammedans, and occupy the country on its western frontier.

*State of the north-western provinces of China, with an account of the origin and progress of the insurrection which broke out in 1827, to subvert the Chinese authority in that quarter.*—*Kashghar*, *Yárgand*, *Khotan*, *Axu*, *Ilah*, and the country of the *Sarah Nashin*, generally called

*Kalmaks*, as well as five or six other extensive tracts of territory formerly belonged to the *Turkmáns*. A long time ago the Emperor of China invaded these places with a large army, and seized them from the *Khojan*, who was then in possession of the government, and exercised both a temporal and spiritual authority over his people. In the course of the war, many of the *Turkmán* chiefs, as well as the *Khojan* himself, fell into the hands of the Chinese, and were put to death; while the rest of the royal family, among which was the eldest son of the *Khojan*, who took the title of his father, sought an asylum with the ruler of *Indajan*, where they remained waiting a favorable opportunity to recover their country. The Emperor of China offered 700 *Zambus*, (silver ingots, weighing about 150 Rs. each,) to the *Indajan* chief, if he would prevent the escape of the *Khojans*. About three years ago, when the *Khojan* was still at *Indajan*, the Chinese force stationed on the frontier was withdrawn towards the *Kara Khatai* country. When the *Khojan* heard of the departure of these troops, the ruler of *Indajan* let him loose, and the *Khojan* collecting a party to *Kirkpiz*, whence he sent a man to *Kashghar*, to ascertain the disposition of the people, they replied that the Chinese force had gone to *Kara Khatai*, and he had only to come and possess himself of the whole country. According to their invitation, the *Khojan* marched towards *Kashghar*, where, no sooner had the *Khojan* made his appearance, than the people declared in his favor, and rose against the Chinese, about 8000 of whom were sacrificed to their fury. The Aibu or Chinese governor of the province destroyed himself by gun-powder. As soon as the news of the occupation of *Kashghar* by the *Khojan* reached the ear of the governor of *Yárqand*, he announced the event to the Emperor, by means of lighted balloons, which were set off and repeated at every stage, until the information reached its destination. The Emperor returned a reply in the same way. This mode of conveying intelligence was never adopted by the Chinese authorities. The *Khojan* succeeded in recovering *Yárqand* and *Khotan*, and every one who was suspected of being in the interest of the Chinese was immediately killed; but the *Khojan* met with some resistance in his attempt to occupy *Axu*, *Ilah*, and the *Kalmak* territory, in consequence of the presence in them of the Chinese garrisons, and their vicinity to each other. Reinforcements were sent also from China to *Kashghar*, and after the lapse of a year, the Chinese succeeded in dispossessing the *Khojan* of his acquisitions; and making a prisoner of him, they confined him in a cage, and led him captive to the Emperor. His fate is not exactly known; some say that he who has been carried into captivity

is not the Khojan ; that the Khojan himself effected his escape to *Indajan*, and is now alive.

*The tribes of Kashghar, Yárqand, and Khotan, and the part they took in the insurrection.*—The population of *Kashghar*, *Yárqand*, and *Khotan* consists of two tribes ; the one is called *Aghtaghlaq*, and the other, *Karataghlaq*. When the Chinese troops arrived for the recovery of *Yárqand*, the *Aghtaghlaqs* were all on the side of the Khojan, in revenge of their adherence to whom the Chinese authorities slew all their males, gave their females and children to their own countrymen, and sent them into distant parts of *China*. Of the *Karataghlag*, such as favored the Khojan, were killed, and the rest set at liberty.

*Commercial operations of the Russians on the Ilah frontier.*—About a year and half ago, a report was received of the Russians having taken *Kapchag*, and arrived at *Ilah*, which is a great entrepôt of commerce. Between *Ilah* and the Russian frontier post is an extensive lake, on the border of which the Russians are stated to have established a fort, and to have built a town in its vicinity. Not wishing to be involved in hostilities with the Russians, the Chinese are said to have paid them a large sum of money to purchase peace. The chief of *Ladakh* has informed the Emperor of China, that the English are constructing a road to *Kaughri*, which is situated near *Ispitti*. On the receipt of which intelligence, the Emperor sent a *Zandu*, or personal inquiry, to *Arzeng*, to watch the state of affairs in that quarter ; and ordered at the same time, his garrison of *Rodokh*, which is 12 stages from *Ladakh*, to be reinforced by a large force.

*Opinion of the people of Iskárdoh of the power and authority of the Emperor of China.*—It is said, that the Emperor of China has 3000 *Zandu* in his service, and that whenever any affair of importance occurs, one of them is dispatched to settle it. They enjoy great confidence, and supersede the authority of the *Aubus* or governors, where they may happen to be sent. If at any time he should suspect or be dissatisfied with the conduct of the *Aubus*, he deposes a *Zandu* to look after him ; they are his most confidential agents, and possess high influence in the state. Wherever a *Zandu* is, his acts are supreme, and no one can dare dispute his authority.

*Articles imported from Russia.*—Twisted gun barrels ; Bulghar hides ; cast-iron vessels ; horses.

*Imports from Yárqand and Kashghar.*—Colored cotton piece goods ; scarfs ; salt ; China silk pieces ; tea ; and *China crockery-ware*.

*Exports.*—Unwrought gold ; *zard alu* (apricots), and other dried fruits ; rhubarb ; asafœtida.

II.—*Journal of a Tour through Georgia, Persia, and Mesopotamia.*  
*By Captain R. MIGNAN, Bombay European Regt. F. L. S. and*  
*M. R. A. S.*

[Continued from page 590, vol. III.]

After arranging our baggage, and paying the boatmen a tomaun, which is equivalent to 12s. 4d., we directed our course due south, and soon arrived at the gates of Meandáb or Meadow. On entering the town, we passed through filthy lanes, bordered by mud walls; scrambled over ruined huts, and descended deep pits, that furnished materials for new ones; till at length we gained a lofty dilapidated wall, enclosing the principal dwellings, and entering the gateway, passed through a miserable bazar. We looked in vain for streets, much less decent buildings, (a few ants' nests presented themselves,) until we were conducted to the houses of some wealthy merchants—these were most carefully concealed from view by high mud walls of the most wretched appearance, and encircling them were the huts of the poor artisans and cultivators. Although night was fast approaching, no lights were seen in any quarter, except the bazars, which were in fact, the only thoroughfares that deserved the name of streets.

We took possession of a large house, the property of one JÁFAR KU'LI KHÁN. Its rooms were capacious, its walls white-washed, and what is very uncommon in Persia, its height was nearly one hundred feet. This edifice was fast crumbling to decay, and upon its summit great numbers of storks had built their circular nests of reed. The natives of the place called them "*Háji Lag-lag*," the former title, from their making a yearly pilgrimage to the level countries during the winter season, (*yea, the stork in the heaven knoweth her appointed time; Jeremiah, viii. 7,*) and the latter, from the loud clattering sound made by its long bills. Although these birds are considered unclean, (*these are they which ye shall have in abomination among the fowls, the stork and heron after her kind; Leviticus, xi. 13, 19;*) yet, they are marked by qualities of an amiable nature, and so attached to house-tops, they appear under no fear of being dislodged. Indeed the natives entertain an idea that they bring a blessing to the dwelling on which they build, and in Egypt, they are held as objects of veneration. BRUCE in his travels, remarks that it was a great breach of order to kill any of these birds in Cairo, and ALI BEY mentions an extraordinary establishment at Zez for the treatment of lunatics: "it is very strange that great part of the funds has been bequeathed by the wills of various charitable testators, for the express



purpose of nursing sick cranes and storks; and burying them when dead.”—(See Travels of ALI BEY.)

Meandáb is on the frontiers of one of the most remarkable regions in the world—Kúrdistán, the Switzerland of the East—an immense succession of hill, valley, dells of exhaustless fertility, and mountains towering to the height of Mont Blanc. The top of the great range of Zagros rises upwards of 12,000 feet above the level of the ocean! The oppression and cruelties it has endured; the vengeance it has inflicted upon its Turkish and Persian neighbours; and, above all, its acquisition of independence: these circumstances together invest this country with a peculiar interest. The geographical division of Kúrdistán is nearly as follows:

|   |              |         |
|---|--------------|---------|
| Kúrdistán proper, comprising the country lying between the degrees of |              |         |
| northern latitude 35 and 38, and longitude 43 and 46, ..              | Inhabitants, | 250,000 |
| Ardelan, .....  | Do. ....     | 150,000 |
| Adiabene, .....   | Do. ....     | 100,000 |
| Total, .....  |              | 500,000 |

Of this population, at least four-fifths are Kúrd; the rest are Christians and Jews. The mountainous regions have at no period been under the Turks or Persians. The horse and the sword had made them masters of the plain; they became feudal possessors of the territory under the tenure of service to the SHAH, and held the remaining Kúrd as cultivators of the soil. But thousands removed to the security of the mountains, and as the Turkish or Persian chain became heavier, they flung it off, and joined their free countrymen. The vacancy produced by this flight has never been filled up, though large emigrations have entered the country; and in whatever quarter they settled, they have been hardy, active and intrepid.

Turkish oppression, on the one hand, and Persian, on the other, has been so directly the source of the chief defects in the Kúrdish character, that in proportion as that fatal influence is weakened, so rises the national character. Its nature is so elastic, that it springs up, even in every momentary removal of the pressure; but its true displays are to be found where the tyrant dares not come. The greatest contrast to the inhabitants of the plains is to be found in those mountainous retreats where there are no foreign inhabitants. Here the Kúrd are hardy and heroic, passionately fond of their homes and country, and subsisting on little. The picture has its dark side. They are inconstant, envious, and treacherous. But it must be remembered, that these defects would be the natural qualities of any people leading such uncertain and distracted lives. In his most

inaccessible hold, pent up amid wild tracts of country, shut out from general communication, liable to frequent and sudden inroads of a merciless enemy, and from his cradle to his grave, either the spoil or the antagonist of the oppressor. Poverty, suspicion, loneliness—a life of hazard—flight or attack—what original constitution of virtue could have attained its true stature? There is no national character that would not have darkened under this perpetual rudeness of fortune. It is really astonishing that the Kúrd retains any qualities entitling him to rank among men.

For several centuries Kúrdistán has been a continued scene of war, turbulence and robbery. Some of its eastern districts have remained in the power of ABBÁS MIRZÁ, whose force has never been able to reduce to subjection the various chieftains in the north and south, who claimed a predatory independence. The form of the country, indeed, is sufficiently favorable to such pretensions; being intersected by mountainous tracts, over which it is extremely difficult to conduct an army. The Eliáts, or wandering tribes, roam over its extensive plains, and the Persians, from Azerbiján, have long carried their ravages not only over the frontier, but into the heart of the country, over its ranges of hills, and to the gates of its towns. The desolation and want of security can hardly be conceived, when occasioned by these ravages. In some tracts, the whole open country has been swept, the inhabitants having been put to death, or carried away as slaves. The consequence is, that numerous small towns, particularly near the frontiers, have been abandoned, as well as all cultivation. The peasant goes out to his labour with his matchlock slung over his shoulder. All intercourse between villages is carried on with the greatest timidity, and at intervals, when a sufficient number of men can be collected to form a káfilah, and to resist the bands of robbers, even these are frequently attacked, and the merchants and travellers composing them not only plundered, but detained in captivity, or murdered. This state of things has given rise to extensive dealings in slaves.

The tribes which range the deserts differ in their habits, according to the circumstances in which they are placed. In some parts they are pastoral, hospitable, and kind to strangers; in others, they are reserved, and shun all intercourse; in others again, predatory, cruel, and ferocious. Those of the latter description are to be found near Lake Van, and in Armenia, towards Erzeroum\*. We find them to the north, on the

\* As a proof of this, I may mention the recent murder of M. SCHULTZ, a distinguished antiquarian and indefatigable traveller. This melancholy event

borders of Georgia, plundering villages, committing outrages, attacking towns, and carrying off Georgian and Circassian girls. On the south, they dispose of their captives, to the traders who supply Bagdad and other Turkish cities; and on the east and west, are found the wild mountaineers, who are not naturally cruel, but obliged in self-defence to assume a fierce character. This effect can only be ascribed to the distracted state of Kúrdistán, and its inability to afford security to the people.

*April 5th.*—My muleteers were slow and reluctant to load the mules this morning, having heard during the night that the Kúrd of these parts were a most desperate set, caring for neither God nor devil; that they never took off their boots from one year's end to another, much less prostrated themselves in prayer; that in fact, we should starve by entering the country, as it would be impossible to hold any communications with them. With little difficulty I convinced them in some degree that these opinions were erroneous, and we quitted Meandáb, directing our course south-east, over a plain surrounded by argillaceous mountains. We then struck into a deep valley, profusely covered with coarse weeds and herbage, and through which flowed a stream formed by the melting snow. When we got half way up this valley, we saw several Kúrdish encampments on our right. They appeared very meanly built, chiefly of mud: they were low, having only one small door to admit light and air, and were roofed with a thatch of reed. There were others formed of two stone walls, with a covering of goats' hair cloth. Although our people were dying with thirst, they would not stop from the fear of being plundered; I, however, rode up to one of these encampments, and was served with *lubbon*, which is a very refreshing beverage. After this, I rejoined the baggage, and we continued to pursue a southerly course, and passed a large body of Kúrd, whose extraordinary dress and appearance, so different from that of the Persians whom we had been accustomed to see, gave a novelty to the scene that was extremely interesting. Their arms, their habits, the furniture of their horses, resembled those of the Turks; but they possessed

took place near the village of Bash-Kullah. Sir JOHN KINNEIR immediately sent a confidential person to the spot to collect, if possible, the traveller's papers and effects, and to take steps for the punishment of the murderers. The loss of this intelligent traveller is one of the greatest which oriental literature has ever sustained; it is to be hoped, that the larger portion of his manuscript collections had been received in France, and that those which were in his possession at the time of his death may yet be recovered: so that the fruit of his extensive travels and laborious researches may not be lost to the world.

a wild ferociousness of air, which is highly characteristic of their wandering life. This interesting group would have been a fine study of costume for HAYTER's accurate pencil. Two of this party joined us, and in a mixed dialect of Persian and Arabic, asked me if I was not going to Sulimániah; for, said they, "we are anxious to visit that city, to pay our respects to SU'LIMAN PASHA, and if possible, to obtain his head for a *foot-ball*." Not liking the appearance of these cavaliers, I was determined to try at an escape by a *ruse de guerre*; so exclaimed, with a feigned astonishment, "Sulimániah! then, I have been misdirected, I am bound for Hamadán, and find I am wandering from my way!" This had a proper effect; for they faced about, and joined their companions. We rode for nine farsangs through a country remarkably well cultivated. The valley we had entered presented an inclined surface to the west, from ten to fifteen miles broad, including the skirts of the hills on either side, little interrupted with irregularities, and all capable of the richest culture, though a great portion lay waste; but the villages were so thinly scattered over it, that it was surprising to see the extent cultivated. The whole soil of the valley was of a fine light-coloured clayey loam; its surface being slightly diversified by hillocks, chiefly artificial, the sites of old villages. A stream of no great natural size, but at this time swelled by the dissolving snows, glided through it, and the hills undulated and retreated into small plains, which were luxuriantly cultivated. I was told that these glens produced wonderful crops, with the aid of a little artificial irrigation. The main valley appeared less productive, but sufficiently so to prove the existence of great fertility of soil, and human industry. Few parts of Persia could equal it. As the inhabitants of the villages are both shepherds and cultivators, they were at this time ploughing the land. During summer they descend to reap the harvest, and leave their wives and children in care of their meadows, and the flocks that graze upon them.

Continuing our route, we passed through an irregular and winding ascent, which brought us to the village of Bogám, situated on the bank of a small rill, which ran into the river Jakuntú. Nothing could exceed the appearance of poverty which prevailed throughout the place, or the want of comfort and security. This is doubtless to prevent the excitement of any cupidity; for even this appearance of squalid misery does not protect the inhabitants from oppression; nor in this neighbourhood are they ever free from the incursions of the Persians. It was only the other day, that JÁFAR KU'LI KHÁN, the governor of Marangha, was ordered by Prince ABBÁS MIRZA to



render this part of Kúrdistan a desert, and to destroy by fire and the sword all the hamlets and their inmates that might cross his track. The Prince's order ran thus: "hang the men upon the trees, and tear them asunder; rip up the women, and tread over them." Upon his approach, the inhabitants flew to the adjacent mountain gorges, and over summits which, as the Persian poet observes, "were never trod by human foot, and scarcely ever by the wild birds of heaven." The order was obeyed in regard to this village, which is now little better than a heap of ashes. Two short years have only passed since I was here on my homeward route, and then Bogám was a flourishing little town.

Not being able to procure forage for our cattle, or even refreshment for ourselves, we departed hence before the dawn of day. Míradý, the object of our march, lay at a distance of thirty-five miles, and the road appeared unusually rugged. About noon we reached a lovely plain surrounded by mountains. Spring had already strewed the ground with her richest bloom; and the brightness of the sky, together with the picturesque appearance of the country, filled the mind with delightful ideas. A serpentine stream meandered through this delicious spot, and the most beautiful lawns diversified the scene. At length we came in sight of the village, and were soon received by its chief, who ordered his women to give us the best room in his cottage. They busied themselves with great humour in clearing away their domestic utensils, and lighted a bright fire for the evening. These women were fair and handsome; they had black eyes, and long dark hair; low in stature, with delicate features. The children of both sexes had fine ruddy complexions, though of course they soon contract a tawny hue. The women of this district appeared very industrious, and always were seen assisting in the toils of agriculture; and on no occasion did they conceal their faces, but went about entirely unveiled; though it was considered a mark of impoliteness to stare at them, nevertheless, they appeared highly gratified at exciting our attention, and we clearly perceived that vanity was the characteristic of the sex in this, as well as other, countries.

After being served with delicious cheese made from the milk of sheep, and some excellent flat cakes of bread, the chief of the village invited me to his home. On entering the house, I saw three or more men seated in a corner of one of the rooms, with some rude-looking instruments resting on their laps. One resembled our flageolet; another, the guitar; and a third, the kettle-drum. A signal being made, one of the men advanced, and seating himself in the

centre of the room, sung a wild air, which was neither pleasing nor melodious. After this, two boys got up and danced; placing themselves in a variety of extraordinary attitudes, which consisted principally of gesticulation. The old chief said, he considered dancing both mean and ignoble, as it was practised by none except such as make a trade of it for hire. But he must have spoken ironically; since the moment they were done, one of the boys presented me with a chibouque, and was very officious, which intimated, that a recompense was expected for the evening's amusement.

*April 7th.*—After taking a hasty meal, and smoking a chibouque with the chief of the village, we continued our way south-easterly, through a glen, where it was refreshing to observe the quantity of cultivation that appeared on every side. On entering a larger valley, a great extent of meadow land was observed, as well as several hamlets. Here also, for the first time, did we remark wood in any considerable quantity upon the hills on our right, which were a ramification of the great Zagros range. The trees were bare of leaves, which made it difficult to determine their species. We now entered a thick jungle, intermixed with rocks, and matted over by creepers. This spot I can never forget, for we were amid an endless variety of forest scenery. The masses of shade thrown down from the naked and fantastic crags that burst abruptly forth, the luxuriant fertility of the mountains, seen through the transparent clouds that floated along below their forest-crested summit, the awful stillness, and the immensity of individual objects, were pregnant with delight and amazement. I have often gazed amid these wilds, while beauty after beauty bore in upon my eye and mind, till I have turned away with a painful fulness at heart; and if my delight were more than was fit for the frame that felt it, I sometimes really thought there must have been some deleterious power in the air breathed in these scenes, until I remembered their palpable and irrefutable beauty. I looked upon the present prospect as if I knew I should never see it again. The snow-capped mountains were towering before us, the sea of forests spreading around; far below, a beautiful stream rippled in the sun, and sent up the music of its plash! The small Muhammedan sepulchre, overshadowed by the tamarisk, crested the banks on the opposite shore, whence streams spread through the bright green land they fertilized, to where a bulwark of hills rose to the clouds beyond the white summits of Mount Zagros.

To clear us from this wooded bower, we hired a shepherd, who appeared to have returned from the plain we had crossed in the morning. The man performed his task faithfully, being allowed no

temptation to do otherwise ; and from his knowledge of the road, greatly shortened our distance. During the march, we frequently passed parties of ill-looking fellows, who were travelling to the town of Ouroomia, and whose inquiries about us, as they greeted our guide, excited something more than my curiosity. I therefore asked him, if those people would have lightened our cattle of their loads, had we been less prepared ? “ Of course,” he replied, “ and *we* of our village would do the same—we none of us scruple, when fair opportunities occur.” This avowal, uttered with the greatest *sang froid*, evinced a resolute principle of rascality ; but as we afforded no “ fair opportunities,” we got on famously together, till the necessity of our acquaintance ceased. We passed an extensive encampment of Eliáts under some overhanging rocks : their wild appearance, mingled with horses, asses, oxen, and sheep, were admirably characteristic of the place, as they met the eye, gathered together in groups around a fire, which emitted its thin spire of smoke. Had *we* known of their vicinity, we should certainly have endeavoured to pass by a circuitous path ; and had *they* been apprised of us, our property would not perhaps have remained unmolested. They were very inquisitive, demanded whither we were travelling, talked both loud and long, and endeavoured to persuade us to remain for the night under the protection of their tents. The scenery around us became so singularly wild, that I regretted the approach of night. Our progress was often much impeded by the thickness of the wood ; but on descending towards a small village, which appeared in a retired nook of the opposite hills, the cliffs grew more majestic, the precipices more lofty, and the forest more beautiful. On reaching the enclosure of the village, we were forced to remain a long time in waiting, before any shelter could be found for us ; and after all, to take possession of a hut, hastily emptied for the occasion, full of dirt and vermin. Every thing was in confusion, and our foolish Muhammedan, instead of exerting himself, stood like a drunkard biting his whip, without ever offering the slightest assistance. Our evening meal was late and cold, and we retired to rest as little pleased with ourselves, as with our attendants. Next morning the inhabitants came in a body to assure us, that it would be impossible to cross the mountains without lightening the mules ; and that even then, the passage would be extremely difficult. I thought this a mere pretext to obtain some money, so refused to employ them in any manner. However, they knew the state of the road better, and following the muleteers, soon convinced us that their services were indispensable. The morning was excessively cold, and as we approached the mountains we had

to ascend, the cattle wound through a sort of rut, or channel, worn in the solid rock, where the width barely allowed us to pass without touching its sides, so that we were frequently obliged to hold up both feet in a horizontal direction, level with the animal's back, to prevent their being bruised between its sides and the rock, which could not be avoided by any other mode. On reaching the base of the mountain, we found that it was extremely precipitous, and consequently were obliged to indent upon the villagers, who triumphantly came forward, and assisted in supporting our cattle. The ascent, which was circuitous and abrupt, occupied the space of four hours, and proved so distressing to the mules, that they were forced to be relieved of their loads. This appeared to assist them very immaterially, as huge masses of snow lay in ravines in every direction, and they sunk to the girths at each step, when, in endeavouring to rise, two of them rolled down the precipice with their loads, which consisted of dead bodies *en route* for Kerbala. On nearing the summit, the road was so terribly furrowed by the dissolving snows, that its ascent became nearly impracticable. The difficulty of this passage was heightened by the conduct of a body of Kúrds, who from the top had been watching our approach, and now commenced hurling large stones upon those bearing our baggage. My muleteer, who had been quaking for the safety of his mules, became much alarmed. "Stakhferallah!" he exclaimed, "there's enough of them, to be sure!" "Never fear, I replied; by the help of Allah, and the Prophet, we may check their fury." "Had we only a dozen brave Kazilbáshes, with their matchlocks and swords, you might then talk so; but now," said the old monkey-faced muleteer, "I fear I shall become a beggar; nevertheless, Allah-hu Akbar!" By this time our trunks had been thrown down in the snow, and the fray commenced with huge crooked sticks, sabres, and matchlocks, mounted with prongs, resembling a hay-maker's pitch-fork. The enemy soon lost the support of four of their party, who were conveyed away wounded, and the majority of the rest in all probability would have willingly given up a contest in which so little was to be gained. But there were among them some of a determined spirit, who urged on the rest to revenge their wounded companions, and exerted themselves successfully to inspire them with confidence. My pistols being loaded, I went amongst them, and threatened to shoot the leader, when they cried out with surprise, "They have guns." This appeared to cool their rage and determination, and on their retreating to the edge of the mountain, we succeeded on rolling them over its side, while the snow shelved down upon their heads, and nearly buried



them. The Memándár, who had hitherto remained an inactive spectator of the scene, approached me, bowing respectfully, and said, "Bárik-allah ! Mash-allah ! may your shadow never be less ; may your servant find grace in your eyes !" but instead of noticing his nauseous expressions, I ordered him to return to his country, as his services were dispensed with. The success of this *debut* gave animation to the old muleteer and his assistants, who exclaimed, "Pundh-be Khodah," and recited a passage from the Qorán, in which the words "La Allah il Allah, Muhammed Rasúl il Allah," were very frequently repeated.

After a most laborious descent from the mountain, we traversed its base in a southerly direction, passing on our way a ruined caravansary, from whence the Kúrd's had issued ; thereby converting into a place of molestation to the traveller, what had been erected for his accommodation. This mountain terminated in a sharp point ; after rounding which, we entered upon well cultivated land, extending to the village of Bannah. Two miles to the northward of this place, we crossed a considerable stream of water, and near its bank several extensive burying places were situated. These places of sepulture were at a considerable distance from any town, and the graves were all distinct and separate, each having a rough block of stone placed upright, both at the head and feet ; while the intermediate space, instead of having a slab placed horizontally, was either planted with flowers or covered with broken pieces of tile. Some few graves had circular rooms, with cupolas built over them, which being kept white-washed and ornamented, exhibited an excellent comment on the expression of our Saviour, when he compares hypocrites to "white washed sepulchres, which appear outwardly beautiful, but within are full of dead men's bones and all uncleanness." The funerals of the Kúrd's have a reference to those of the Hebrews. How earnestly does the patriarch Jacob enjoin his sons to bury him in Canaan, in the family sepulchre ; and Joseph, in like manner, exacts an oath from his people, to carry his bones with them when they leave Egypt. If a Kúrd dies at a distance from his native village, the inhabitants are bound to remove the corpse, and inter it with decency. I have often met a party escorting one who was never more to smile or weep in this mortal world, and on conversing with them, they dwelt upon the disgrace and ill-luck which would be attached to him who neglected to bury a body in its "proper place of rest." We observed graves decorated with garlands as among the Welsh, which are removed at the end of the mourning. We reached Bannah at night-fall, nearly exhausted by fatigue and hunger, and assembled round a

blazing fire in the Sheikh's house, where some excellent coffee was ready to be offered. I have often wondered how these people could have lived before the discovery of this beverage, the champagne of the East. In the most desolate Khan it is handed round, and if you refuse to carry it to your lips, you are considered to be displeased with your accommodation, or at the behaviour of your attendants.

In the room next to the one we occupied, three Turks were reposing. In the course of the evening they requested I would share a pipe with them. After smoking together for some time, one of them said, "We have just arrived from Bagdad, and are travelling *Chupper* (post) to Tabriz. Where are you going? Have you got any money? Are you a Russian spy? Perhaps you wish to enter DAUD PASHA's service. He has already a *Feringhi* (alluding to Mr. LITTLEJOHN, formerly Adjutant of H. M.'s 2nd or Queen's Royal Regiment,) instructing the half-starved Fellahs how to put themselves into a number of odd positions." One of his companions interrupted him, saying, "He is not a *Feringhi*, but one of the *Ingrése* from Hind, and a sharp fellow too; though I don't like to see these changes, or we may all be turned into the great desert." I asked what had occurred at Bagdad? The Turk raised his head, and without ceasing to attend to a large coffee-pot which was on the fire, began, "By my soul, DAUD PASHA, our master, will soon have no more Tchocodars; he prefers the Giaours to us already! What shall we do if the Pashas and Aghas are able to eat us as they like? We must all fly to these mountains, and become Kúrds! Our Fellahs are all discontented, the taxes of the unbelievers have been increased, and perhaps even Mussalmans will have to pay them. Those Muscovite dogs have revolted against the Sultán, because he would not make their Sheikh a Sultán also. Even the Ingrese will soon compel the true-believers to chastise them, as I have heard say they now refuse to pay tribute, and even MAHMOUD himself is more like them than a true believer. He likes their ways better than his own. God is great; he knows if these changes are for the better: and as to that son of a dog MUHAMMED ALI PASHA, who has done it all, may Allah grant that his eyes may burst." "Inshallah, Inshallah," shouted his companions, who considered their friend's speech a very eloquent one.

On our quitting Bannah, the temperature became more moderate, the country was hill and dale, and the whole one continued coat of verdure. From hence the sloping sides of the mountains were covered with oak trees, and to us, who had been accustomed to the arid hills and mountains of Persia, it was a luxurious prospect. The road afterwards wound through wild and rocky defiles in the moun-

tains, and by the side of a rapid torrent. We followed its rills, which were beautifully fringed with willows, presenting to the eye a pretty appearance. It is this plentiful supply of water which renders these tracts so fertile; while in Persia, this inestimable blessing is the most scanty of nature's bounties. The plains and hills are also equally destitute of wood—a few trees only being planted in the environs of cities, chiefly, if not entirely, for the purposes of building. So great and manifest are the natural advantages of Kúrdistán, that the verdict of all travellers is unanimous in commending the fertility of her soil. But since the beginning of that time from which we have any authentic records of her history, wars, dissensions, and violent distractions, have scared away improvement, and Kúrdistán is still

— “An unweeded garden  
That grows to seed.”

In ascending a very abrupt mountain, the mules had to walk literally upon the edge of a precipice, where the least false step would have consigned them to inevitable destruction: yet the confidence of the muleteers in the steady tread of these animals was such, as to make them trot on without the slightest apprehension. From the top of the mountain a most sublime and extensive view presented itself. Immediately in front of us appeared the snowy ranges of Mount Zagros towering to heaven, and beneath them several beautiful valleys and plains extended to the base of the mountain we were commencing to descend; while on either side, and in the rear, were hills of various elevation, without assuming a bare or barren appearance. Had I seen this picture of nature upon canvas, I should at once have pronounced it a production of the imagination. Here was an assembly of natural beauties, precipitous mountains, rich valleys, clear brooks, fantastic rocks, and wooded crags! Man alone has steeped it in gloom, and rendered its inhabitants a desperate people. But Kúrdish history is one of suffering, and well may I address that beautiful country in the feeling language of the poet—

Oh tu! cui feo la sorte  
Dono infelice di bellezza, ond' hai  
Funesta dote d'infiniti guai,  
Che in fronte scritti per gran doglia porte?

Without any exception, I may safely aver that Kúrdistán is the loveliest country I ever beheld. The passes over its mountains are of the highest interest to the traveller, as they offer opportunities of observing portions of the globe, which must from their nature have been in their present state since their creation. In their recesses, he may observe from the wonderful and varied position of their stratifi-

cation what have been the operations of nature on the grandest scale. These passes are in truth the most sublime and solemn solitudes that can possibly exist, and rouse the breast of man to meditations bordering upon rapture. Uninterrupted by the intrusions of the world, he can hold converse with his God in the midst of his most awful works—

To sit on rocks, to muse o'er flood and fell,  
To slowly trace the forest's shady scene,  
Where things that own not man's dominion dwell,  
And mortal foot hath ne'er, or rarely been ;  
To climb the trackless mountain all unseen  
With the wild flock that never needs a fold ;  
Alone o'er steeps and foaming falls to lean ;  
This is not solitude ; 'tis but to hold  
Converse with nature's charms, and view her stores unroll'd.

On arriving at the base of the mountain, we descried the wide prospect of the windings of the Bostán river, that issues from the Carducian mountains. Bostán, being interpreted, signifies the "garden," and gives its name to a small hamlet and valley situated on the southern bank of the river—a denomination well due to the whole of the surrounding country. Its hills are clothed with wood, its villages embosomed amongst trees, and its fruitful soil reminded me of countries where man is, "like a tree planted by the rivers of water, that bringeth forth his fruit in season, whose leaf shall not wither, and whatsoever he doeth shall prosper."

Independent of these lovely valleys and plains which display the most abundant fertility, the mountains in general possess a soil of considerable depth ; and the wild luxuriance of unforced vegetation proves their productive qualities. The order of cultivation appears to be thus : the plains and valleys are appropriated to grain, the southern slopes of the hills form vineyards ; the northern produce the oil and tobacco plants ; and on the summits and inaccessible crags the goats and mountain sheep browse upon the heath, while oxen, horses, and cows, graze upon the pasture that skirts the villages. Wheat and barley are both plentiful and cheap ; grapes are not so richly flavoured as the Persian, but cherries and other stone fruits are the finest I ever ate. The Kúrdistán walnut is the largest in the world, and nearly all the European fruits are very abundant. The cattle are small, but of the best breed, and so are sheep and goats. They all sell cheap, as well as horses, which are proverbial for performing the most astonishing journeys. Sir JOHN MACDONALD KINNEIR assured me, that he had ridden a distance of seventy miles over this mountainous country without once dismounting from his horse ; and in June, 1828, I purchased a gelding at Bagdad, that carried me to



Tiflis in sixteen days. The distance is nearly a thousand miles! The cows yield about half a gallon of milk daily, and the sheep and goats assist to supply the dairy: cheese being always made of their milk. They use the wild artichoke to turn the milk, and their cheeses are made up into small round cakes. Their butter is well flavoured, but not of much consistency. It is churned by putting the cream into a goat's skin suspended to the side of a tent, and tossed to and fro. The Bedouins practise the same method. "Dans un peau de chèvre, encore garnie de ses poils ils mettent le lait, comme dans une outre. Une femme Bedouine après avoir fortement noué les deux bouts, et suspendu le tout à une branche d'arbre, en secouant l'outre de toute sa force, parvient à faire le beurre."—(*Castellan. Mœurs des Ottomans, t. 6, p. 60.*)

Several tribes have five thousand sheep: they seldom kill any, but subsist chiefly on milk and butter. Hence, the number is continually increasing.

The Kúrdish villages, although small, are very numerous, and all built in the same style, of large unhewn stones, which have no binding material. They consist of an outer and inner room only, having a floor, and walls plastered with mud, and a roof formed by cross beams of wood, covered with reeds, or straw matting, and over that again, a thick covering of mud. They are generally seated upon the declivity of a mountain, and some idea may be formed of the steepness of their streets from this peculiarity of position, that the top of one house forms an exact level with the bottom of the one above it; and each house having a door that opens into this space; the roof of one dwelling forms a level walk for its next, or upper neighbour, where the inhabitants sit to enjoy their chibouques. We remained the night in one of these hamlets, and left shortly after day-break for the capital. After descending with great abruptness for ten miles, crossing several mountain torrents that wriggled over our track like serpents, we entered a gorge in the mountains, and commenced our ascent up the wildest mountains I had ever seen. The morning was unusually sultry; and during our journey, a dreadful storm of hail and sleet, accompanied by thunder and vivid lightning, broke upon us. We were soon enveloped in a thick mist, which brought to my remembrance the situation of the ten thousand Greeks under ZENOPHON, during their ever memorable retreat over these very mountains. They were hid from the enemy by a *mist* similar in density to the one we here experienced; for it was with difficulty we could at times discern objects at ten yards' distance. Having reached a considerable height, a sublimely vast extent of

mountain, ravine, and glen lay exposed to our glance; but were quickly obscured by the passing clouds. It was now easy to discover, without the help of any barometer but that of our own feelings, that we had reached a great elevation—a fact which was proved by the successive risings of hill over which our road was directed. Still ascending, we came to the extreme summit, from whence we saw the city of Sulimániah marked by trees in a nook of the mountains. It appeared beneath our feet, although we were full ten miles from it. In fact, from this lofty pinnacle, we seemed to descry at once “all the kingdoms of the world, and the glory of them.” Our descent was one of extreme difficulty; but our eyes were delighted with the general aspect of the valley below, and the situation of Sulimániah at the end of it. The hills by which it was surrounded on all sides were sufficiently broken in their outline to be picturesque, and the plain which skirted them at their feet was clothed in the richest verdure. The grain-fields assumed a lovely appearance; the gardens occupying distant portions of the valley, and a stream meandering through it, gave such a luxuriance to the picture, as to unite beauty with fertility, and wealth with usefulness.

On nearing the city, a mound of considerable magnitude rises on the left of the road, which nearly resembled the *tumuli* of Greece. It is not improbable that the spot may mark the tomb of some Greek general. Many similar may be seen in Kúrdistán, which nearly resemble those in Wiltshire. Indeed, such remains of antiquity are spread over the whole surface of the globe.

Sulimáuiah, or Sulimáney, the Shéhrazour of the ancients, is most romantically situated on the northern bank of the river Díála, in a deep valley, irregularly formed by the bases of the Carducian range, which, covered with forests of oak, and clothed in snow to its summit, entrench it on every side. Its geographical position is 35° 30' north latitude, and 44° 45' east longitude. During the retreat of HERACLIUS this city was distinguished by the name of Siazuros, and not far hence was the city of Holwán, the retirement of YEZDEJERD after the battle of Cadesia, a spot to which the Khalifs of Bagdad resorted during the summer season. It was ruined by HULAKO, and has never since recovered its consequence.

Sulimániah is an unwallèd town: its houses are built extremely low, which gives them a mean appearance, though doubtless they are better secured against the snows and cold of this elevated region. The streets are narrow, and run irregular; and there are neither good bazars nor fine mosques to relieve the dull monotony of the common buildings. The houses are mostly built of unhewn stones,

plastered over with mud; though some few are constructed with bricks. The climate is said to be very fine, and the inhabitants, who approach to the number of 20,000, are robust and active: their aspects forbidding, their expressions of countenance harsh, and their complexions dark. The government of Sulimániah is in the hands of a Pasha, who is by birth a Kúrd, and subject to neither Turks nor Persians. His name is SULEMÁN, and he is highly popular and very indulgent. For the purpose of pleasing the Russians, he sends an annual present in cash to ABBÁS MIRZA, who the northern barbarians hope will soon employ their officers in preference to those of the English. Count PASKEWITCH is desirous of taking the Kúrd under his *especial* protection, that in case of need, they may harass by their sudden and repeated incursions the inhabitants of those countries by which they are bounded. For such a duty they are eminently fitted. The military force for the defence of the town does not exceed 2000 men. About a fourth of that number are frequently in attendance at the palace, which is the Pasha's residence. It is a mean and ruined pile, composed of spacious courts and extensive inclosures. The trade of Sulimániah is in a very declining state; there are only two or three Armenians, agents for some Bagdad merchants, who receive gall-nuts in exchange for a few Indian commodities, which come up by the way of Bussorah.

Nothing is known of the history of Sulimániah. M. NIEBUHR visited this part of the country in the year 1769, and found the people subject to a sort of feudal government. They are imagined to be the Carduchai of ZENOPHON, and their national character has descended unchanged from time immemorial. KINNEIR has made Sennah, which is situated about ninety-five miles to the eastward, the capital; but the Wály or chief of that town is a mere creature dependent upon His Majesty of Persia, to whom he transmits a handsome sum annually. The father of the present Wály was a man of great power and independence; but he became deranged, and unfortunately, madness would seem to run in the family, as his son has given ample proofs of it.

Sulimániah is an extensive place, and forms a central emporium to the neighbouring tracts of cultivation. The country which surrounds it is charming; the soil gravelly, as far as its immediate vicinity; when it becomes more sandy, and of a light loamy nature. The rich appearance of the wheat and barley I have already noticed, the green at this time was most beautiful. We found the tillage of the district excellent; the fields being neatly divided into square compartments, for the benefit of irrigation.

Being the bearer of a letter for the Pasha, he assigned me a house in the best part of the city, and I found the people both civil and obliging. They pretend to pique themselves upon hospitality, but how its duties are discharged, will depend entirely on circumstances. For instance, in the year 1828, habited as a Turk, I travelled through Kúrdistán in company with a man who pretended to be a lineal descendant of the prophets; and we journeyed a distance of six hundred miles, halting at this city on the way, without spending the sum of ten Persian rials. The Seyad afterwards assured me, that he was offered a wife at every village through which we passed; but, added he, "as I was your Mehmándár, I could not act with such indecorum." However, he actually had a wife of his own, at every town of note between Bagdad and Tabriz. This man's name is ISHMAEL; he has often served English travellers, and has always given infinite satisfaction. At the time I am now writing, I have not disguised myself, but am in the costume of my own country; the consequence is, I find travelling here more expensive than in Persia. Nevertheless, I would advise all travellers who care not for the expence, and have plenty of spare time, to pass hence in their own dress; for their persons are respected, and in security: whereas, by adopting a foreign garb (although better opportunities are afforded of observing the people and country), a traveller might be murdered for the value of a decent pair of shulwárs (*breeches*). My own life was attempted more than once at the time I have just referred to, but, now I feel as secure as if I were passing through Regent Street.

Amongst those tribes whose morals have been vitiated by habits of rapine, it is unsafe to trust to the strongest professions. For there can be no doubt that cruelty and avarice characterize this people, though they by no means hoard their money; always preferring to convert it into horses, mares, lances, pistols, swords, and ornaments for their women. Cash is not very current amongst them, purchases being made by barter. In all my travels I never could procure change for a sum equivalent to a rupee.

The females are not shut up in this or any other Kúrdish town; nor are they veiled, like those of most Muhammedan countries. On entering the house of a Kúrd, you are not annoyed by women rushing in every direction to escape notice. During my stay amongst them, I constantly met women in company with men, without veils. It is true they are not permitted to eat with the men, but in every other respect they are entirely free. As far as my own observation extended, they were not possessed of those personal charms which might impose the necessity of restraint, though a few of them, if



dressed up in the Parisian fashion, would be considered pretty brunettes; their complexions were not so dark as to veil their blushes. They were generally small and well made, and had large dark eyes, the appearances of which they take great pains to show off to the best advantage. They dye their eye-brows with a collyrium called in the Arabic "*khattat*." It is reduced to a fine powder. The eye-lids are painted with the "*kahel*," and the lashes blackened with a reed, which is passed between the eye-lids. The angles of the eye are also tinged and prolonged, which makes it appear much larger. The ancient Egyptian ladies, as well as the modern Persian, are represented as having resorted to the same arts of the toilette. Juvenal admirably satirises the Roman ladies for this coquetry.

"Illa supercilium, madida fuligine tartum,  
Obliqua producit acu, pingitque trementes  
Attollens oculos."—(Juv. Sat. ii. l. 93.)

Another fashion equally essential to Kúrdish beauty, requires that the nails of the hands and feet should be stained with henna; and so very general is this custom, that any woman who should hesitate to conform to it would be considered immodest. The soles of the feet are likewise daubed with the same coloring. The fingers are sometimes partially painted; and to prevent the henna taking every where, the fair artists twist tape round them before they apply it, so that when the operation is completed, their fingers are fancifully marked with orange-colored stripes, which is by no means improving to a fine hand. In fact, the delicate whiteness of the palm, and the rose color of the nail, is utterly effaced by this dye.

In a large town like Sulimániah, it is not to be supposed that the women enjoy the same degree of liberty as they do in villages; indeed, they are often much watched; and in the marriage contract, it is insisted that the bride shall exhibit those proofs of her innocence, which afterwards she is expected to confirm by her conduct. In fact, a bride would be returned to her parents, should she be unable to produce the testimonials of her virginity. I have certainly seen them very familiarly inclined, but I was told they are not backward in assuming the semblance of enticement, that the incautious stranger may proceed to improper liberties, upon which these artful females accuse the unhappy guest of freedom and insult; when their male relations seize upon his baggage, and otherwise molest him.

In their mode of life, the Kúrd are habitually abstemious, subsisting on the coarsest rye-bread and manna; and when meat is introduced at their meals, it has seldom undergone any further culinary preparation than that of boiling in plain water. Some travellers have

spoken of their personal cleanliness, but on this point I certainly cannot agree with them. In regard to cleanliness, none of the Asiatics can be compared to ourselves. Their repeated ablutions very imperfectly remove the evils attendant on the length of time they wear their clothes. I speak from an intimate acquaintance with the practices of Muhammedans in general. Circumcision is supposed to contribute to cleanliness, and is not confined to our sex alone, as the girls of many tribes undergo an operation somewhat similar just before they reach the age of ten. I am ignorant of the manner in which it is done, as the natives are not very communicative on such subjects; but there are women who live by the performance of it. The barbers operate on the males, and are esteemed unclean from the profession they exercise.

The Kúrds have a practice of removing all the hair from the parts of the body, where we suffer it to remain; and where we carefully shave, they as carefully cherish its growth. The women also practise depilation in the following way: A thin cord is dipped into some particular gum, and drawn slowly over the parts, when it removes all that adheres to it. This process is extremely painful; but the remedy does not require a frequent recurrence, as it either produces a complete eradication, or if a new growth appears, it is merely a soft down, which may be removed with facility.

Another remarkable contrast between European and Asiatic taste is, that corpulence and bulkiness form the greatest trait of beauty. It is natural enough, therefore, that the females are desirous of acquiring a superiority in this particular. They accordingly eat a great variety of sweetmeats, candied fruit, and particular vegetable substances, grated down, and mixed with conserves. This latter composition is thought to be adapted both for vigour, and that *en bon point*, which is so delightful to their admirers. A Kúrd of some rank, in describing the charms of his intended bride, said to me with much seriousness—"She is as large as an elephant!"—He considered this comparison the very acme of perfection.

---

III.—*On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic series.* By JAMES PRINSEP, Sec. &c.

In my last notice on the subject of coins, I promised to bring forward demonstrations *in kind*, of the direct descent of the Hindu coins of Kanouj, from what have been denominated the Indo-Scythic series. In attempting to redeem my pledge, I am aware that I run counter to the opinions of those who maintain that the Hindus practised the art of coinage, and had a distinct currency of their own before the Greeks entered India; especially my friend Colonel STACY. To him my opposition might appear the more ungracious, since the weapons I am about to use are chiefly those he has himself so generously placed in my hands; but that I well know he is himself only anxious to develope the truth, and will support a cherished theory no longer than it can be maintained with plausibility at least, if not with proof.

I am not, however, about to contend that the Hindus had no indigenous currency of the precious metals. On the contrary, I think evidence will be found in the collection about to be described, that they circulated small pieces of a given weight; that stamps were given to these, varying under different circumstances; and that many of these earliest tokens exhibit several stamps consecutively impressed on the same piece, until at last the superposed impressions (not those of a die but rather of a punch) came to resemble the devices seen on the Indo-Scythic coins, in company with which they have been found buried in various places, particularly in Captain CAUTLEY'S Herculaneum at *Behat* near Saháranpur.

That from this period, in round terms, may be assumed the adoption of a *die-device*, or of coined money properly so called, by the Hindus, is all I would venture at present to uphold; and in doing so, I will not again appeal to the assertions of PAUSANIAS\*, quoted in ROBERTSON'S disquisition, that the Hindus had no coined money of their own; nor to the silence of the Mahábhárat and other ancient works on the subject; but solely to the close family resemblance of four distinct classes of Hindu coins to what may be called their Bactrian prototypes; namely, those of *Kanouj*; the later class of the *Behat*, or the Buddhist; group; the coins of *Sauráshtra*, found at *Ujjain*, in *Guzerát* and *Cachha*; and those which Colonel STACY has denominated *Rájput* coins, having the device of a horseman on one side, and a bull on the other.

Before proceeding to comment upon the first of these classes, my tribute of obligation and praise is due to Colonel STACY, for the

\* See J. A. S. vol. i. page 394.

persevering labour and true antiquarian zeal, which have alone enabled him to gather together such a rich collection of this peculiar and rare type, and for the disinterested readiness with which he has placed them at my disposal, to select from and publish at once, thus depriving him as it were of the first fruits of his enterprize and toil. It is true that so far at least as regards the merit of discovery, his title will rather be confirmed than injured by early publicity; but the employment of another hand to illustrate his materials may do injustice to his own careful classification; and modify the opinions and deductions regarding the origin, connection, and antiquity of various groups, which he may have derived from a larger and more intimate study of the subject, and from the actual inspection and handling of thousands of coins, that have been withheld from insertion in his select cabinet.

The home collector, who like myself, but receives contributions from others, may learn, from the superior fulness and novelty of many of the following plates, to appreciate the advantage of personal exertion over second-hand acquirement. In further proof of this, I could produce some of the letters now lying before me, received from Colonel STACY on his several coin excursions. Here he would be seen putting up with every inconvenience, enduring the burning heats of May, or the cold of December, under trees or in common serais in Central India; digging in deserted ruins, or poring over the old stores of village money-changers, after having (the principal difficulty and art), won their confidence, sometimes their interest, in the object of his pursuit: sparing neither money nor time to gain his end, and after a hard search and fatigue, sitting down, while his impressions were still warm and vivid, to communicate the results of his day's campaign.

Col. STACY felt himself for a moment disheartened on beholding the treasures of Gen. VENTURA and his followers: but although the character of the Bactrian relics necessarily eclipses all that can be expected from a Hindu source, while their prolific abundance astonishes the gleaner of Hindu relics, a moment's reflection should restore a full or even increased degree of satisfaction. Hindu history is even more in need of elucidation from coins than Bactrian. The two countries are in fact found to be interwoven in their history in a most curious manner, and must be studied together. The alphabetic characters, the symbols, and most especially the *link-coins*, (emphatically named so by Colonel STACY,) are fraught with information on this head, which can only be extracted by multiplying the specimens, and thus completing the chain of evidence. It will be seen shortly, that



several of the dynasties to which the coins belong have been identified through the names and legends they bear, and many new princes, hitherto unheard of, have been brought to light. Let not therefore Colonel STACY desert his line for one more engaging, but persevere in it as long as anything remains to be explored.

I cannot resist in this place pointing out the line of search recommended by Colonel TOD, (to whom is justly ascribed the paternity of this branch of numismatic study,) in a note on the late *Panjab* discoveries published by him in the Asiatic Journal of London for May: "Let not the antiquary," he writes, "forget the old cities on the east and west of the *Jumna*, in the desert, and in the *Panjab*, of which I have given lists, where his toil will be richly rewarded. I possess bags full of these Indogetic gentry; and I melted down into several sets of basons and ewers, the rust of ages from which the tooth of time had eradicated whatever had once been legible. . . . I would suggest the establishment of branch-committees of the Asiatic Society at several of the large stations, which would have a happy moral result in calling forth the latent talent of many a young officer in every branch of knowledge within the scope of the Society. *Agra*, *Mathura*, *Delhi*, *Ajmír*, *Jaipur*, *Némuch*, *Mhow*, *Ságar*, &c. are amongst the most eligible positions for this object . . . . A topographical map, with explanations of ancient *Delhi*, is yet a desideratum, and of the first interest: this I had nearly accomplished during the four months I resided amidst the tombs of that city."

In thanking Colonel TOD for his encouragement and advice, I must be allowed to differ altogether as to the means to be employed. Committees are cumbrous, spiritless, and inactive engines, for such an end; when anything does appear to be effected by them, it is generally the work of one member, whose energy is only diluted and enfeebled by the association. Give me rather the unity of design, and quickness of execution of (I will not say agent, as Colonel TOD suggests, but of) an independent pursuer of the object for its own sake\*, or for his own amusement and instruction. It is by such as

\* These I may say are already provided at more places than Colonel TOD points out: Colonel STACY at *Chitor*, *Udayapur*, and now at *Delhi*: Lieutenant A. CONOLLY at *Jaipur*; Captain WADE at *Ludiana*; Capt. CAUTLEY at *Sehāranpur*; Lieut. CUNNINGHAM at *Benares*; Colonel SMITH at *Patna*; Mr. TREGGAR at *Jaunpur*; and Dr. SWINEY (now in *Calcutta*), for many years a collector in Upper India. And for the exterior line, Lieut. BURNES at the mouth of the Indus; Messrs. VENTURA, COURT, MASSON, KERA'MAT ALÍ and MOHAN LA'L in the *Panjab*; besides whom I must not omit Messrs. H. C. HAMILTON, SPIERS, EDGEWORTH, GUBBINS, Capt. JENKINS, and other friends who have occasionally sent me coins dug up in their districts.

these that all the good has hitherto been done; the extension of patronage followed rather than preceded or prompted the great discoveries of last year in Kábul\*.

The plates I have prepared to illustrate my subject have not been numbered in the most convenient order for the purpose; but as it is a matter of indifference which line we commence upon, it will be fair to give our first attention to Plate XXXIV. containing the so long postponed continuation of the coins and relics dug up by Capt. CAUTLEY at Behat, and noticed in the Proceedings of the Asiatic Society on the 14th January last.

The exhumation of this subterranean town has not perhaps been followed up with so much vigour as it would have been, had not its discoverer's attention been diverted to other antiquities of more overwhelming interest—the fossil inhabitants of a former world—before which the *modern* reliques of a couple of thousand years shrink into comparative insignificance. Perhaps indeed the notion of a city at the spot indicated by these remains should be modified. Professor WILSON writes me, that he cannot suggest any ancient city of note so situated; yet if it existed so late as the 3rd or 4th century of our era, it ought surely to be known. It may probably have been the site of a Buddhist monastery, which became deserted during the persecutions of this sect, and was then gradually destroyed and buried by the shifting sands of the hill torrents. Some of the relics now to be noticed forcibly bear out this supposition.

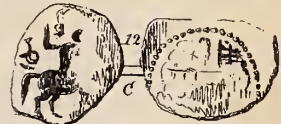
*Plate XXXIV. Behat Group.*

The upper half of this plate contains a continuation of the relics dug up at *Behat* by Captain CAUTLEY.

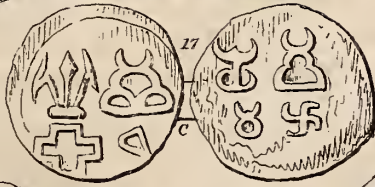
Fig. 1 is the object of principal interest, because it stamps the locality as decidedly Buddhist, and leaves us to infer, that the coins are the same, although their devices have nothing that can be positively asserted to be discriminative of this sect. The figure represents two fragments of a circular ring of baked clay. In the inner circumference are carved or stamped, a succession of small figures of BUDDHA seated, apparently 12 in number; and on the upper surface, a circular train of lizards. It is difficult to imagine the purpose to which it could have been applied. In some respects it may be compared

\* We have arrested the press of this sheet to announce the arrival of the second memoir by Mr. MASSON, on the produce of his labours at *Beghram*—the same announced some time since by Captain WADE. We shall hasten to prepare lithographs of the numerous figures with which it is illustrated, although comparatively few (not more than 5 or 6) of them are altogether new after Gen. VENTURA'S collection.—ED.

Relics from Behat near Schäranspur.



from the Panyab.



from Jaunpur



from Central India

from Central India





to the semi-circular sculpture near the *Bo*-tree at *Anurádhapura* in Ceylon, depicted in the 3rd volume of the Royal Asiatic Society's Transactions; but, in that, the ring of animals consists of elephants, horses, tigers, and bulls, alternately\*; four animals, which have a place in the *Bauddha* mythology; whereas I am not aware that the lizard is regarded in any degree of reverence by the Buddhists.

Fig. 3, an old ring of copper. This, like the more ornamental ring of Plate XVIII., volume 3rd, may in some respects be looked upon as a *Bauddha* relic; for in its metal it accords well with an extract from the *Dulva* in M. Csoma Körösi's Analysis of the Tibetan Scriptures, containing *Shákya's* injunctions that his priests should only wear seal-rings of the baser metals. "Priests are prohibited from wearing rings, and from having seal-rings of gold, silver, or precious stones; but they may have seals made of copper, brass, bell-metal, ivory, horn. A man of the religious order must have on his seal or stamp a circle with two deer on opposite sides; and below, the name of the founder of the *Vihara*. A layman may have a full length figure, or a head, cut on his signet."—Leaf 11, 12, volume X. of the *Dulva*—Asiatic Researches, xix. 86.

The circular devices of some of the coins (23 of this Plate, 31 and 32, of the following,) may perhaps also be explained by the rule of this teacher cited in the same extract, that the priests should use no other impress than that of the circle; and it is remarkable, that the deer is the very animal found on the most prominent silver coins of the group, such as fig. 16 of the present plate, and 48 of Plate XXXV., (see also volume iii. pp. 227 and 434.)

Fig. 4. A small image of baked clay; is more like a plaything for children than an object of worship.

Figs. 5, 6, 7, 8, 9, 10, are varieties of the peculiar coins of the *Behat* series already noticed in Plate XVII. of volume iii.

The characters in many are tolerably distinct, and are clearly allied to, if not identical with, those of fig. 22—a true descendant of the *KANERKOS* series, as will be presently shewn in my Indo-Scythic Plate, LI., figs. 16, 17, (q, v.) The emblems also on many, a bull

\* "At the foot of the steps to this second building, and let into the ground, is a very remarkable slab of hard blue granite: it is semi-circular, and sculptured in rings or bands of different widths. Some of the patterns are scrolls, equal in beauty to any thing Grecian; one consists of the *Hansa* or *Bráhmāna* duck, bearing the root of the Lotus in its bill; and the most curious has figures of the elephant, the horse, the lion, and the cow, which are repeated in the same order, and sculptured with great spirit and accuracy of outline."—*Roy. As. Soc. Trans.* III. 467.

and an elephant, may be imitations of the Azos coin. In fig. 7, the & symbol is exactly a *Chaitya*, or Bauddha monument, as I had from the first supposed.

The tree is also satisfactorily made out in fig. 15, and in many of the coins in the following plate. In fig. 23, it is seen at the side of a walking figure; and above it, in a very perfect coin of the same type, since sent to me by Lieut. CONOLLY, the sun shines,—as it were on the saint and his holy tree.

The three most conspicuous letters on all of these coins are  $\omega\psi$  or *y dh y*, and it does not seem any great stretch of imagination to see in them a part of the word *Ayodhaya*, the seat of one of the earliest Hindu dynasties, and which was at the commencement of Buddhism almost as much the resort of its founder SHÁKYA, as *Rājgrīha* the capital of *Magadha*. Still from the association of these coins with those of the Indo-Scythic dynasty, it would be hazardous to attribute to them any greater antiquity than the early part of the Christian era.

The metal of these coins is a mixture of tin and copper, which retains its figure well, and is white when cut.

Figs. 11, 12, will be recognized as Indo-Scythic coins: being found along with the rest, they serve to settle the point of antiquity.

On fig. 13, are the letters  $\omega\psi$  (in Tibetan  $\text{ཡེ་ཤེ་}$  . .) *p rája s*.

On fig. 16, are a further supply resembling more the *lúth* alphabet  $\text{ཨ་ཕ་ཨ་ཕ་}$  . . *a mapasáte* . . . The same combination occurs in fig. 45, otherwise so different a coin; on the reverse, the letters under the symbol very much resemble the Pehlevi  $\text{𐭣𐭥𐭥𐭥}$  *malakáo*. This silver coin is of M. VENTURA's collection.

Fig. 17, is peculiar for its multitude of symbols, most of them known to us by their occurrence on other coins. This specimen is also of the VENTURA collection.

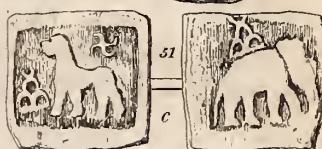
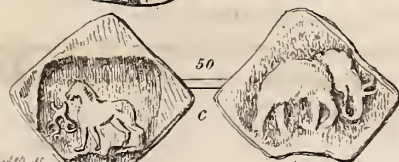
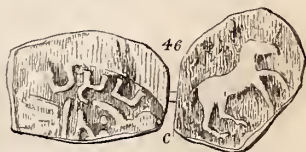
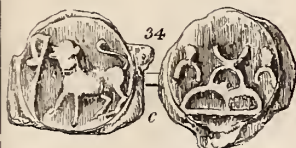
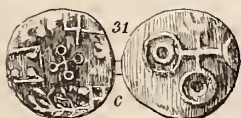
Fig. 18, a coin in Mr. TREGEAR's possession. Several of the same kind have been before introduced into my plates, but hitherto the figure under the elephant has been supposed to be a prostrate elephant vanquished by the upper animal. The multiplication of specimens has at length shewn us the true character of the doubtful part, and that it merely consists of two of the common symbols of the series.

But we must now turn to Plate XXXV. in which, thanks to Colonel STACY, I have been able to attempt a more methodical classification from his abundant supply of this Buddhist series of coins.

*Plate XXXV. Stacy's earliest Hindu Coins.*

It is an indisputable axiom, that unstamped fragments of silver and gold of a fixed weight must have preceded the use of regular coin



*Ancient Hindu Coins.*








in those countries where civilization and commerce had induced the necessity of some convenient representative of value. The antiquarian therefore will have little hesitation in ascribing the highest grade of antiquity in Indian numismatology to those small flattened bits of silver or other metal which are occasionally discovered all over the country, either quite smooth, or bearing only a few punch-marks on one or both sides; and generally having a corner cut off, as may be conjectured, for the adjustment of their weight\*. Many instances of this type have been given in Col. MACKENZIE'S collection, (figs. 101 to 108 of WILSON'S plates) who describes them as "of an irregular form, bearing no inscription, occasionally quite plain, and in any case having only a few indistinct and unintelligible symbols: that of the sun, or a star is most common; and those of the *lingam* (?) the crescent, and figures of animals may be traced." The Colonel's specimens were chiefly procured in South India: others have been dug up in the Sunderbans:—and many were found at *Behat* (fig. 14.)


But the few selected specimens in Col. STACY'S collection, (figs. 25—29) yield more food for speculation than the nearly smooth pieces above alluded to. On all these we perceive the symbol of the sun to be the faintest of those present: in two instances (figs. 28, 29) it is superposed by symbols which may be hence concluded to be more recent. These are severally, the  *chaitya*, the tree, the *swastika*  and the human figure; besides which in fig. 26, we have the elephant, the bull, and the peculiar symbols of figs. 34—37. They are all stamped on at random with punches, and may naturally be interpreted as the insignia of successive dynasties authenticating their currency.

In one only, fig. 30, does there appear any approach to alphabetic characters, and here the letters resemble those of the *lāths*, or of the caves on the west of India, the most ancient written form of the Sanscrit language.

From the above original seem to have descended two distinct families, of which one was produced by the hammer and die, the other by casting in a mould. Of the latter, easily recognizable by the depth of relief, the projecting keel on the margin, shewing where the moulds were united,—and the greater corrosion due to the softness of the cast metal,—we have various groupings, and sub-divisions, but most of them agree in bearing the  monogram for their obverse; sometimes, as in figs. 34, 35, 36, 37, with addition of two smaller symbols,  $\alpha$ , like the sign of Taurus reversed.

\* Their average weight is 50 grains, or the same as the *tan̄k* (= 3 *māshas*) of the ancient Hindu Metrology. Indeed the word *tan̄k-sāla*, mint, goes far to prove that these are the very pieces fabricated for circulation under that name.

On the reverse, we have frequently a dog with a collar (and bell?) guarding a sword or flagstaff of victory, (*jaya dhvaja*?) figs. 20, 21, 34, 35, 36. At other times an elephant (fig. 39); a bull (37), or the sacred tree (15, 38): and, in rarer cases, the device on both sides is changed, as in 40, 41. Figs. 18, 42, and 43, (in the latter of which the elephant might easily be mistaken for a deva nágari letter,) are of the cast species; to which also belongs the multi-symbolic coin, fig. 18, of the last, and its fellows of former plates. The leaden coin 49, is also cast, but it is probably a forgery of some copper original.

Of the second branch, or die-struck coins, we have also several subdivisions—1st, the peculiar bronze-metal (*Ayodhya*?) coins of Behat in the last plate; to which belongs 44, with the tree symbol, and a sitting dog on the obverse: 2nd, a groupe, (figs 45, 46, 47,) having a horse on one side, similar to Lieut. CONOLLY's coin, fig. 1, Pl. XXV. of vol. iii.; 3rd, the stag and *chaitya* coin, (figs. 16, 48; also figs. 1, 2, and 6, of Pl. XVIII. and fig. 4, of Pl. XXV. vol. iii.); and 4th, those square rude coins, first pointed out by MASSON, having an elephant on one side and a lion (dog) on the other, with the characteristic symbol  figs. 50 and 51, of this kind are from the VENTURA collection.

Upon most of the latter or die-struck species are portions of inscriptions in the *lúth* character, as was first clearly determined from Lieut. CONOLLY's coin, (Pl. XXV. vol. iii.) The letters so well defined on that type coin may be read, *विदाहेवस*, *vidáhévasa*; the second in the list there given was converted into *तपसलक्ष*; the third into *भगवतरूप*: but such renderings, having nothing beyond their being real Sanscrit words to recommend them, are hardly admissible. In the same manner, nothing can be made of the combination *patama dásata* of fig. 45; *pasaha* of 46; or *ramahata* of 47: the last coin is curious, from having an alligator or lizard symbol, similar to the sign on the porcelain ring from Behat (fig. 1.)

In explanation of the absence of any of the titles of sovereignty in these legends, the quotation already cited from M. CSOMA's analysis of the *Dulva* may be again brought forward—that under the symbols of the circle, deer, &c. the name of the founder of the *Vihara* should be inscribed;—indeed the whole of the above passage is singularly applicable to this group of coins; and, in conjunction with other evidence, suggests the idea that the Buddhist coinage was struck in the monasteries of the priesthood, where the learning, skill, and riches of the country would naturally follow their attainment of influence, and ascendancy over princes and people. The same argument may account for the imitation of Bactrian or Indo-Scythic

Indo-Scythic Coins - Kanerkos group



Reverses



obverses



15 c



16 B



17 B



17-18





devices in the later coins of the series ; since it is well known, that Buddhism prevailed through these countries also, and a constant inter-communication must have been consequently kept up. How far the antiquity of the first Buddhist groups of coins may have approached the epoch of BUDDHA (544 B. C.) it is difficult to determine, but the acquisition of their similitude to the Indo-Scythic coins must have been posterior to the breaking up of the genuine Bactrian dynasty, perhaps about the commencement of the Christian era.

*Plate LI. Indo-Scythic Coins resumed.*

Having disposed to the best of our knowledge of the earliest Hindu coins, we must now return to the Indo-Scythic series, for the purpose of conducting the reader through the promised line of connection into the second great field of Hindu imitation.

Enough has been said on former occasions of the two principal families of this type, the KADPHISES and the KANERKOS groupes ; but with a view of systematizing a little the information already obtained ; and, at the same time, of introducing a few new and very beautiful coins lately added to our list, I have collected in the present plate the principal varieties of the KANERKOS *mithriacs*, subsequent to the adoption of the vernacular titles *rao* and *rao nano rao*.

With the most common obverse of the Indo-Scythic family, a raja clad in the Tartar coat and inscribed PAO KANHPKI, fig. 3, I have traced on the copper coins, as well as in the gold ones, the following series of reverses, NANA (for *nanaia*), NANAO, MAO, MIOPO, MITPO, MIOPO, MIPO, APO, OKPO, and a word not very clearly made out on fig. 8, OADO. Of these, the explanations have been already attempted\* ; *mitkro*, *mitro*, *miro*† are but varieties of *mithra*, the sun, whose effigy on the genuine Greek coins of KANERKOS is plainly entitled ΗΑΙΟΣ. *Okro* I have conjectured to be intended for *arka*, the Sanscrit name of the sun ; and his four-armed effigy in fig. 7, more beautifully developed on the gold coin fig. 1, an unique obtained by KERÁMAT ALI at Cábul, confirms this opinion. *Athro* has been before stated to be the Zend word for the igneous essence of the sun, and accordingly, we find flame depicted on the shoulders of the figures bearing this epithet, in fig. 6, and in fig. 2, a very pretty little gold coin, for which I am also indebted to KERÁMAT ALI. *Nanaia*, remaining feminine in NANA of fig. 4, has been shewn to be the Persian *Diana*, or the moon :—and in strict accordance with the Brahmanical mythology, this deity is made masculine in NANAO and MAO, the *más* or *lunus* of the Hindus,

\* See vol. iii. p. 452, et seq.

† Lieut. CUNNINGHAM has added this variety from a fine gold coin.

and on his effigy in figure 9, (as in former drawings in vol. iii.,) the horns of the moon are seen to project from behind his shoulders.

The same devices in every respect are continued upon several succeeding coins of the *Rao nano rao* series. The chief varieties of the obverse of these are given in figs. 2, 9, 10, 11, 12, 13, 14. The order in which they should be placed is necessarily doubtful; but judging from the comparative perfection of the Grecian letters, the "couch-lounger," fig. 9, and the "elephant-rider," fig. 10, should have precedence over the rest.

Fig. 9, from the VENTURA collection, is a very perfect specimen of the couch-lounger. He has a glory extending around his body, as well as his head, and his titles, *rao nano rao* and *korano*, are distinct; but the name is unfortunately missing, no more than O O being visible.

In fig. 10, we are not more fortunate, but from the succession of *o*'s, we may guess the word to be OOHMO or OOHPKI, names already known on the gold coins. Some of the Manikyála elephant coins had the name KEN PANO. This family is extremely numerous, and is procurable among the old pice of every bazar in Upper India.

The names on the last series, figs. 11 to 14, are illegible; but the letters are still Greek. The three first specimens are selected from a number in Col. STACY's cabinet, to exhibit the varieties of the sitting posture, and its gradual transition to the squat position of the Hindus. Col. TOD has supposed the figure in a coin similar to fig. 11, to be Parthian; but what he there took for a bow was evidently the ornamental contour of the back of the prince's throne or *sinhásan*. Fig. 14, is from a coin in Col. SMITH's possession.

In fig. 15, of this plate, drawn from a plaster cast of a bronze, embossed, *chaprís* or badge in the VENTURA collection, we may conceive the full device of the elephant obverse to be developed. The faulty proportion of the rider still prevails:—the flowing fillets to the head-dress; the *ankush* to guide the animal; the glory around the face, are visible in both; but the name is wanting.

Of figs. 16 and 17, the former from Col. STACY's, the latter from Col. SMITH's, cabinet, I have already noticed a less perfect specimen while descanting on the earliest Hindu coins. The general style of the figures on both faces so strongly resembles that of the KANERKOS coins, that I feel disposed to look upon them as imitations. The legend has a fourth letter very distinct, besides some less distinct on the left hand, योधि य योधि य *yodhiyala. . tajaya*.

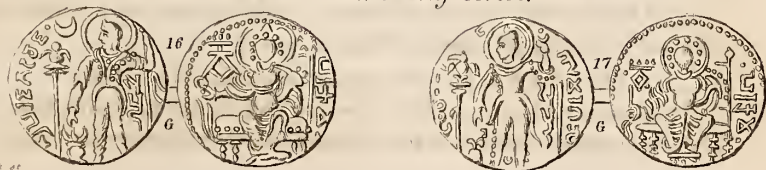
#### Plate XXXVIII. Indo-Scythic and Hindu Link-Coins.

It is worthy of remark, that none of the KANERKOS coins have a Pehlevi legend; although the collateral series of KADPHISES, which

*Connection of Indo-scythic with Canouj Coins.*



*Hindu Coins, Canouj Series.*







possesses so many attributes in common with them, invariably has this accompaniment. Considering that all the Bactrian family have the same, it would perhaps be better to place KADPHISES as the last of the *Pehlevi* series, immediately before KANERKOS\*, and he will thus follow most conveniently the *Kadaphes choranos* described in my last paper. Indeed, as the word *Kadphises* never occurs except in conjunction with some other name, as OOHMO, or OOKMO, it may be read as a patronymic appellation of the family—the descendants of KADAPHES.

Of the gold coins of KADPHISES, two varieties only were hitherto known to us. By singular good fortune, Colonel SMITH has met with a third, and with duplicates of the former two, in the common bazar of Benares! His agent purchased the three, which are engraved at the top of Plate XXXVIII. from a shroff, who said they were sold to him two years ago by a Marhatta pilgrim to the holy city, in whose family they must doubtless have been hoarded for many centuries, for their character precludes any suspicion of their genuineness. Of fig. 2, I have since found a duplicate in KERÁMAT ALI's last despatch to myself: fig. 3, is a duplicate of the one Dr. MARTIN† extracted from the

\* They must have been nearly contemporaneous. Lieut. CUNNINGHAM tells me, he has just obtained 163 KANERKI and KADPHISES copper coins, which were dug up in a village near Benares. The proportions of each type were as follows: KADPHISES and bull, 12; KANERKI, 60; elephant-rider, 48; running or dancing figure on reverse, 13; couch-lounger, 13; cross-legged, 5; squatted figure, 8; and undistinguishable, 4. In the collections from the Panjáb, the ill-executed descendants of the bull reverse predominate.

† The May No. of the Asiatic Journal of London contains an announcement of the safe arrival of this coin and of the collector himself, in Italy. Col. TOD on his travels happily found, and translated the following notice from the *Bulletin* of the Archæological Society of Rome, which our readers will read with avidity, although in fact it adds nothing new to our information.

“Signor HONIGBERGER has returned from a voyage in the east, laden with an abundant antiquarian harvest of most important medals. Among the more remarkable are a large one of DEMETRIUS; another, very beautiful, and in fine preservation, of EUTHYDEMUS; and a third, extremely perfect, of HORMUSDAS of the Sassanian dynasty: all three, it would appear, hitherto unknown (*inédites*). But what seems to us to merit still more consideration, is a similar monument, with the name of a king KADFISE written in Greek characters. Signor HONIGBERGER discovered it in the vicinity of Kábul; where, in a small wooden case, amongst a quantity of ashes and earth, he found a little silver box containing the above-mentioned coin, together with a blackish (or dark-coloured) Nerastra (stone in the form of an egg), with some small bones, apparently those of a child. Upon the medal is the bust of an aged man, of no very noble expression, bald-headed, in a simple garb, and holding in his right hand an implement resembling a hammer. Around it is a very distinct inscription, in Greek characters, ΚΑΔΦΙΣΕC ΒΑΣΙΛΕΥC; and less-well-preserved, other cha-



pronged symbol between them, and a mysterious triangle above. This little coin is unique. The next, fig. 9, is equally curious, though others in copper have been met with by Colonel STACY. The epigraphe borne by these is ΑΡΔΟΧΡΟ, which I suppose to mean "the great sun;" *arda* or *arta* in *Ardeshir* and *Artaxerxes*, having that acceptation. On the copper coins, the word appears corrupted to ΟΡΟ ΟΚΡΟ, and this is probably the epigraphe of the dancing figure in Plate L.

In fig. 10, the name of the moon, ΜΑΟ, and the lunar crescent, are satisfactory and conclusive, as to that being the correct reading.

And now we come at last to the main object to which this essay was directed, namely, to discover the prototype of the Kanouj coins in those of Indo-Scythic fabric.

The great majority of what are called the Kanouj gold coins have on the obverse a prince standing precisely in the attitude of ΚΑΡΦΙΣΗΣ and ΚΑΝΕΡΚΟΣ. The dress alone betrays a slight variation, being in some instances almost the coat and trowsers of the present day. On the reverse is a female seated sometimes on a couch, more frequently in the native fashion, holding in her left hand a cornucopia, in her right a *pása* or noose. This class of coin has long been known. A brass-pot, containing, it is said, two hundred of them, was accidentally discovered by the wearing away of the east bank of the river Huglí, 10 miles above Calcutta, some years ago. Twenty-four were presented to the British museum, an equal number to Dr. W. HUNTER, and a portion to the India House; the remainder were dispersed among private collectors. It was from one of these that Mr. WILSON's No. 13 was drawn; and the same store furnished the figures in MARSDEN's plate. The latter author in his *Numismata Orientalia*, vol. ii. page 725, has the following passage, which will serve excellently well as a text to the present section of our essay:

"Some learned antiquaries think they discover in these the evidences of a Greek origin; but on this point I do not see enough to justify an opinion, and shall refrain from conjecture; cherishing the hope that future discoveries of Indian medals may throw a light upon the subject, which is in itself of the highest interest."

To this challenge we have now the good fortune to be able to respond most satisfactorily, for in figs. 11 and 12 (of the VENTURA collection), we find precisely the obverse and reverse above described with the marginal legend in Greek, *rao nano rao. korano*, and the superaddition of some incipient rude Nágarí in the position afterwards occupied by legible Sanscrit names and titles. To set the comparison in the clearest light, the two lowest coins in the page have been inserted, fig. 16 from Gen. VENTURA's, fig. 17 from Col. SMITH's, cabinet,

to shew the identity of the two classes. The description of them in detail belongs to the next plate, where instead of deteriorating, they will be found to improve, while they become indianized. An opposite effect is, however, observable in a second branch, derived from the same stock, which it is difficult to account for, unless by supposing a divided realm, one portion flourishing and patronising the arts, while the other maintained naught but the shadow of its pristine glory and ancestry. This declining gradation is exemplified in figs. 14 (VENTURA); 13 (STACY); and 15 (KERÁMAT-ALÍ); wherein at last it is barely possible to trace the semblance of the sacrificing rája on the obverse, or of the female on the reverse; although from the insensible gradations in a multitude of specimens, such are undoubtedly the figures. Fig. 15, is a very common coin in silver and copper: one was extracted from the *Mánikyála* tope, and was then supposed to bear the representation of a crab and a dagger! That coin, it will be remembered, bore the obvious Nágari letters श्रीयग. Many others have been since discovered with the same; and it should be remarked, that the form of Nágari in these differs essentially from that of the collateral branch.

Here then we have the Indo-Scythic paternity of the Kanouj coinage proved by the best evidence: and now we will proceed to examine in detail its Hindu offspring, before entering upon the natural enquiry whether such a fact is borne out by the meagre remnants of history and tradition that are applicable to this obscure period.

*Plate XXXIX. Hindu Coins—First Kanouj Series.*

The Deva Nágari alphabet, published with Mr. WATHEN's translation of the Guzerát copper-plates two months ago, will be found to apply in every respect to the coins before us: it is also nearly identical with the Gayá and Allahabad alphabets; the principal exceptions having place in the *m*, which in the latter is written more like *ʹ*, while in the former it is *ʹ*; and the *s*, which is respectively *ʹ* in the latter, and *ʹ* in the former. To avoid the necessity of casting a new fount of type to illustrate the following observations, I have availed myself of the pervading similarity of the Tibetan alphabet; which, though several centuries later, can, with the alteration of a few letters, be employed for our purpose much more readily than the modern Deva Nágari.

The Tibetan *r*, ར, answers for *t* of this alphabet: ང for *d*, and the prosodial stroke འ for *r*. The latter letter when inflected with the *a* or *i* vowel, may be represented exactly by the Nágari short and long *i*, *ī* and *ĩ*. For the *k*, *g*, *dh*, and *m*, I have been obliged to cut new type ཀ, ཁ, ཏ, མ; and for the letter which I have supposed from some likeness to the Tibetan ཡ, to be *a*, I have given the new symbol ཨ



the same, it will be remarked, that was excluded from the consonants in the *lith* alphabet No. 1. The remaining letters require no explanation, as a comparison of the type with the engraved figures will shew their slight difference of form.

The readings of the inscriptions in the present plates are for the most part new, and have been made out, dictionary in hand, by one unacquainted with Sanscrit :—they therefore claim indulgence, and will succumb to any more plausible interpretation from the professed scholar.

To begin with the two coins of the last plate, which appear to belong to the same sovereign ;—we find on the obverse (combining the two figures), the words  $\text{श्रीपारिजातवर्माश्रीराजः}$  *Sri? (a) parajita davaja*. On the opposite side of a duplicate fig. 17, we find the name  $\text{कुमारगुप्तः}$  *Kumára gupta*, and on the reverse, to the right,  $\text{पारक्रमः}$  *parakramah*. The whole title may be interpreted, (if in *davaja* we suppose an ignorant writing of the word *dhvaja*,) “The hero of the unconquered standard, the blessed KUMÁRA-GUPTA.”

Beneath the left arm of the *Rája* also are three letters superposed  $\text{ཡུ}$  in the Tibetan manner, *spyu* ; which we learn from M. CSOMA DE KÖRÖS to be pronounced *chu*, and to signify *Rája*. The same word is prefixed to every prince's name in the list of Assam Rájas. The triliteral compound may, however, denote a date. A duplicate of Colonel SMITH's coin, 17, was presented to me by Captain WADE. The WILLOUGHBY cabinet possesses another, and Mr. WILSON has given one precisely similar, in which we find the  $\text{कुमारगुप्तः}$  *Kumára gu (pta)* of the obverse, and the  $\text{पारक्रमः}$  *parakrama* of the reverse very well marked—the first letter however in this, as in our coin, is more like *bhu* or *su* than *ku*.

In all of these specimens the trident of the *Rao* coins is changed into a standard, having a bird at the top, somewhat resembling the Roman eagle.

Figs. 18 and 19, are placed next in succession, because the cornucopia lady still sits on a couch in the European fashion. The *Rája* here holds a bow in the left hand, and in the right, a short stick ; for the fire altar below it is now removed. A bracelet on the shoulder, and the head dress, begin to look Indian. The letters on the margin of the obverse are lost, but in the bow, we find  $\text{चन्द्र}$  *chndr* superposed as before. MARSDEN reads this combination *Chandra*, with some plausibility. On the reverse of 18, is the name or title of the prince  $\text{श्रीविक्रमः}$  *Sri Vikrama*.

On fig. 19, the name is quite different  $\text{महर्षि उपातिरुहा}$  *úpati rurha*, “The averter of misfortune.”

The first and last letters of this name or title are doubtful, and on my first examination of the coin whence the drawing was made, I thought the first two letters might form the *bh* of WATHEN's *Gujeráti* alphabet, making the word *bhúpati rurha*, 'the overthrower of kings.' I have named the last letter from its resemblance to the *ṭ* of the Nágari alphabet. These two coins were dug up at Juaupur by Mr. TRUGGEAR, whose description will be found in vol. iii. p. 617.

Figs. 20 and 22, are of the kind described by MARSDEN. The goddess of plenty here sits in the native fashion on an ornamental stool, or a lotus flower. The cornucopia also is transformed into a large flower at the end of a stalk. The *Rája* still holds the bow, but he has a sash in fig. 20. The letters on the area are new, but hardly legible; and only on the reverse of fig. 22, can we attempt to decypher  $\text{𑀧𑀭}$  a portion perhaps of the former name, *Vikrama*. Fig. 20, was given to me by a lady; fig. 22, by Mr. CRACROFT.

Fig. 21, is a thin one-sided coin found by Lieut. CONOLLY, in the ruins of Kanouj; the letter beneath the left arm is here  $\text{𑀧}$  or *kra*: its meaning doubtful.

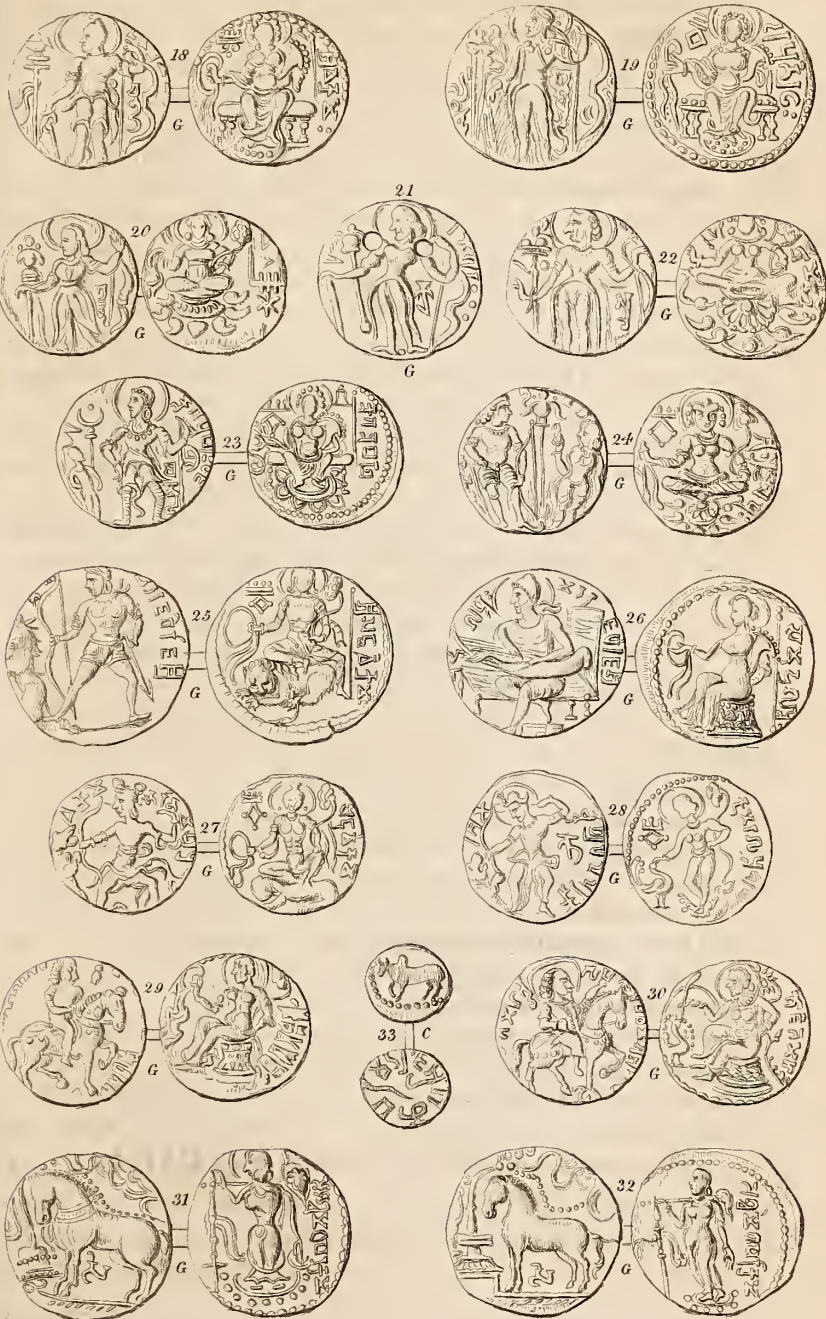
The next two coins were assorted together in the plate, because they had both two figures on the obverse; they are, however, essentially of different periods; and, if our former reasoning be correct, fig. 23, (of Lieut. CONOLLY's collection,) should be classed before the last two, or even earlier than any of the set; for it is difficult to form any Sanscrit name out of the characters on either side. Lieutenant CUNNINGHAM has kindly favored me with an impression of a similar coin in his possession, by which the legend of the obverse appears to be composed of the letters  $\text{𑀧𑀭𑀢𑀺𑀓}$  *kragipta paragu (pta)*.

In the obverse of the coin before us the same letters may be traced; but after the  $\text{𑀓}$  follows a  $\text{𑀧}$  making the word *kragipta paraguja*, a strange and unintelligible compound. On the reverse, the first three or four letters agree with the above; but the final is rather a  $\text{𑀧}$  *pha*, and the one preceding it is closed at the top, making it  $\text{𑀧}$  *va*. These may be faults of execution in a foreign artist, but they place the interpretation beyond conjecture.

Fig. 24, presented to me by Mr. G. BACON, as discovered (or rather purchased) at Kanouj, has already found a place in Prof. WILSON's plates. The dress of the male and female on the obverse is completely Hindu, as is the attitude of the reverse. The legend was given in facsimile in the *Researches* thus:  $\text{𑀧𑀭𑀢𑀺𑀓𑀲𑀺𑀓𑀲𑀺𑀓}$  and may be read, with allowance for imperfections,  $\text{𑀧𑀭𑀢𑀺𑀓𑀲𑀺𑀓𑀲𑀺𑀓}$  *Sri Chandra gupta*.

Fig. 25. We now come to an old acquaintance, the happy discovery

*Hindu Coins. Canouj Series.*












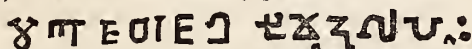
of Lieut. CONOLLY, which has acted as a key to all the rest. An account of it is inserted in vol. iii. p. 227, where, however, on Dr. MILL's authority, the name was read as *Srī mad Ghavo Kacho*, from a misapprehension of the letter *m*. The reading commences on the obverse with the full title \* *Mahārāja Adhi Rāja Srī* (the name is cut off), and on the reverse  *Srī SACHHA VIKRAMA*. The second word is doubtful, and without sense: perhaps it may be *Srī Pradyu*, 'the heavenly,' or simply *Srī mad Vikrama*.

Fig. 26, is another most important acquisition, for which we are beholden to Colonel STACY. An imperfect drawing of a similar coin appeared in WILSON's plates, which only misled as to the device, as well as the legend: both are here equally distinct. The Rāja sits on a chair playing on a kind of harp, whence we learn his accomplishments; while the margin teaches us his titles and part of his name . . .  *Mahā Rājādhi Rāja Srī* . . . *dra gupta*. The first letter of the name is the only one at all doubtful, and it is possible that the name may be simply a repetition of the one more unequivocally legible on the reverse, viz.  SAMUDRA GUPTA.

I insert here the facsimile inscription of the duplicate coin of the Researches, of which I have luckily preserved the lead-cut:



Its identity with the above is manifest, *Mahārājādhi rāja Srī Samudra-gupta*.







Fig. 27, is a sorry duplicate of the CONOLLY coin, belonging to Colonel STACY, with a variation of the epigraphe  *Vikrama Narinamagupta*. I incline to think that the  is intended for , and that the word should be *Narendra-gupta*, or it may be intended for *Narāyana-gupta*. The name on the reverse corresponds with fig. 25, *Srī pradyu Vikrama*.

Fig. 28, is from a sketch of a coin in Lieut. A. CUNNINGHAM's cabinet at Benares. He has since sent me faithful wax impressions, which expose slight inaccuracies in my outline. From neither, however, can the inscription encircling the hero triumphant over the lion be satisfactorily deduced; it may possibly be : *Srī bal parakrama*; the letter on the field is, in the facsimile,  *ku*.

On the reverse we are more lucky; for the legend, which I take to be the prince's name,  *Kumāra-gupta*, "the protected of Mars,"

\* In using the Tibetan character, sometimes, we are forced to omit the long *a* vowel mark, which is merely a prolongation of the *matra*, or horizontal head-stroke in the coin writing.




ful nature. Mr. WILSON read the whole *Nara-gupta*: Dr. MILL, *Sasi-gupta*. I have nothing new to offer on the subject\*.

Having now ocular demonstration of the intimate relation of the Indo-Scythic with the 2nd class of Hindu coins, the question naturally suggests itself, whether history is altogether silent on a point of such curious interest?

In first contradiction of such an inference, we find that the Indo-Scythic origin of the Rahtore dynasty of Kanouj has been advanced on very plausible grounds by the highest authority on this subject, Col. TOD, the annalist of Rājputāna†. He obtained from a *Jati*, (*Yati*) or Jain priest of a temple at *Nadolaye*, an ancient town in *Márwár*, a genealogical roll of the Rahtores, about 50 feet in length. "After detailing the usual theogony, it describes the production of the first Rahtore 'from the spine (*raht*) of Indra,' the nominal father being 'YAVANASWA, prince of *Parlipur*.' Of the topography of *Parlipur*, the Rahtores have no other notion than that it was in the north: but in the declared race of their progenitor, a *Yavan* or Greek prince of the *Aswa* or *Asi* tribe, one of the four which overturned the Greek kingdom of Bactria, we have a proof of the Scythic origin of this Rājput family."

May it not be possible that the *Yavana* prince here alluded to may be the Azos (in Pehleví *Azo*) of the series of Bactrian coins published in my last notice? The Sanscrit word *Aswa* would be pronounced *Aso*, and be thus written in Persian or Pehleví (as *deo* for *deva*, &c.) The number and variety of his coins would imply that the name or title was that of a considerable dynasty, and some of the devices, for example, Nos. 10, 11, Plate XXII. of the goddess holding a cornucopia, may have naturally been the prototype of the Kanouj coins.

A considerable interval (from 300? to 470 A. D.) provokingly occurs between the name of YAVANASWA and the next prince, in Col. TOD's list—whether also omitted in the Jain original, or filled up only by barbarous and uninteresting names, we are not informed. The blank is relieved at length by the name of a genuine Hindu, NAYANA-PÁLA; but it happens that the missing part is the very one that could alone throw light upon our numismatic discoveries. Several coins (including the whole series of Kadphises and Kanerkis, intervene after

\* Since finishing my plate, I have received a drawing of a small silver coin from Mr. TREGGAR, found at Jaunpur, having a head on one side, and on the other a bird, with outspread wings, under which in clearly defined characters is  *Chandra-gupta*.

† Tod's Annals of Rājasthan, vol. ii. p. 5.

Azos, before we are brought to the absolute link coins of the Indo-Scythic and Hindu dynasties.

The name of *Náyana-pála* bears so near a resemblance to *Naráyana-gupta*, that a strong temptation arises to regenerate Colonel Tod's prince in him, on the same grounds on which his predecessor has been brought to life in Azos.

Indeed it would hardly be exceeding the bounds of legitimate conjecture, (where all is mere conjecture,) to adopt a historical representative of our KANERKI himself in the KENEK-SEN of Colonel Tod, *Sén* being according to him merely a martial affix, equivalent to General or *Sénapati*.

KENEK-SEN, the founder of the Balhára dynasty according to the concurrent testimony of all the chronicles consulted by Tod, emigrated to *Sauráshtra* about the year 144 A. D\*. "from the most northern province of India, *Lohcote* or *Lahore*." In date and locality this origin would agree well with KANERKI: nor would it even set aside the former supposition of the same prince being the Tartar KANISKA of the Cashmír history; since that prince is made the sixth in succession after ASOKA, the great patron of the Buddhists, who is placed by their chronology in 250 B. C., but who, when the correction for *Chandra-gupta* is applied, will fall full 50 years later.

In reasoning upon the probable seat of these obscure dynasties, it is by no means necessary to confine ourselves to one spot. The annals of *Mewár*, *Delhi*, *Málwá*, *Sauráshtra*, shew a continual intermixture, as different princes acquired the ascendancy.

*Kanouj* has been fixed upon as the locale of the present class of gold coins, for the obvious reason that they are most frequently found in its ruins, not that any history ascribes them to this town; for the history of *Kanouj* is a perfect blank anterior to the fifth, we may even say the tenth century: and if the town had been suddenly involved in destruction, it is only certain that the coins found afterwards in its ruins would be those of the particular epoch, whether coined there or elsewhere.

There are arguments in favor of placing the seat of government further to the west, for instance at *Ujjain* (*Ujjayini*.) In the first place, the perfect identity of the coin-alphabet with that of the *Guzerát* inscriptions lately decyphered by Mr. WATHENT:—then, the prevalent worship of the sun in *Sauráshtra*, and at *Ujjain*, where this object still forms the distinguishing symbol on the coinage†, agrees

\* Tod's *Rájasthan*, I. 215.

† See preceding page 480.

‡ The greater banner of *Mewár* also exhibits a golden sun on a crimson field, Tod I. 137.



well with the effigy of OKPO and APΔOKPO on the Indo-Scythic coins\*. Again, the peacock of many of the *Kanouj* reverses is found on one of the principal series of *Sauráshtra* coins, as will hereafter be shewn; and Colonel TOD states that this sacred bird of the Hindu Mars (KUMÁRA) was the favorite armorial emblem of the Rájput warrior. Lastly, many of the names on these coins may be traced in the catalogues of the *Málwá* and *Guzerát* princes; *Vikrama*, *Chandra*, *Samudra*, *Kumára*, *Ajita*, &c. the last four are coupled it is true with the family affix *pála* instead of *gupta*; but both of these have the same signification.

In the *Rájávali* of Rája RAGHUNÁTH, quoted by WILFORD as the chief authority in Central and Western India, we find a sovereign named VIKRAMA reigning in the year 191 A. D. and succeeded, or rather supplanted 90 years later, by a SAMUDRA-PÁLA. The deeds attributed to these two are supposed to be merely an interpolation of the fabulous history of VIKRAMÁDITYA and SÁLIVÁHANA†: but the occurrence of these two names is very curious, allied to the circumstance and appearance of the two coins, figs. 25 and 26, of Plate XXXIX.

The only other instance of the occurrence of the name SAMUDRA-GUPTA, that I am aware of, is on the Allahabad pillar, where he appears as the son of a CHANDRA-GUPTA; and from the close similarity of the alphabets of the coins and of the láths, no reasonable doubt can be entertained that they relate to the same individual—a fact predicted by Dr. MILL in his valuable observations on this new race of kings (vol. iii. p. 267), to which the reader is referred for all the light that collateral history affords on the subject.

The name of VIKRAMA is referred by MARSDEN to *Bikram-tschand* (*Vikrama-chandra*) of the fourth century, in ANQUETIL's list of the kings of Central India‡. KUMÁRA-PÁLA is also one of the many names of SÁLIVÁHANA.

There is no reason however why *Kanouj* should not at some periods have been united under one sovereignty with the western provinces. The great VIKRAMÁDITYA (whose appellation in full is found on one of MARSDEN's coins) conquered *Indrapreshtha*, and extended his sway over the whole of India.

The Rahtore sovereigns of *Kanouj*, after its conquest by NAYANA-PÁLA, Col. TOD says, assumed the title of *Kam dhuj* (*Káma dhvaja*).

\* *Bhatarka* (sun-cherished) is a title of the earliest Balabhi Rája's in Mr. WATHEN's inscriptions, p. 480.

† As. Res. IX. 135.

‡ Num. Orient. II. 727.

If this alluded to their armorial insignia, we may thus find an explanation of the standard on the earlier coins ;—and it may be equally applied to the *Aparajita dhvaja* of fig. 16.

Another curious circumstance is mentioned in Col. Tod's chronicles of *Márwár*, that may help us a step forward in the investigation of this obscure history. It is there said, "DHARMA-BHUMBO had a son, AJAYA CHANDRA. For twenty-one generations they bore the titles of *Rao*, afterwards that of *Rāja*." We are again left in the dark as to who first assumed the title of *Rāja* ; but as we find the title *Rao* in Greek visible on the very latest coin that bears an inscription in that character ; while on the fine gold coin discovered by Lieut. CONOLLY, of VIKRAMA, fig. 25, we have the title *Mahá-rāja Adhirāja Srí*, quite distinct ; it must have been between the two that the change of title was assumed. But I should be inclined to interpret the above passage in the *Yatí's* roll, as meaning that up to AJI CHANDRA, or for the 21 generations preceding him, the title *Rao* had been used, and henceforward that of *Rāja* was adopted : for why should the historian allude to the circumstance until the change of title actually took place ? Moreover, there are only 16 generations mentioned from AJI CHANDRA down to the last of the Kanouj sovereigns, the celebrated JAYA CHANDRA or JEY-CHAND, anterior to whom the title was certainly borne, for we find it on the coins of VIKRAMA, SAMUDRA-GUPTA, and others, names not included in the list, but which we know from the style of the Deva Nágari character must have belonged to a much earlier epoch than the seventh or eighth century, in which BHUMBO is placed.

The Rev. Dr. MILL has led us to put little faith in the authority of the bards and panegyrists of the native courts ; and it must be confessed, that the contrast of Colonel Tod's genealogy with the incontestible testimony of the Sanscrit inscriptions read by COLEBROOKE, FELL, and WILSON, is enough to perplex the most ingenious amalgamist ! We must then maintain a thorough independence of all such traditionary documents, and adhere in preference to the faithful evidence of monuments and coins. In the present case, I have shewn how these confirm one another in a remarkable and unexpected manner, in regard to the names on the Allahabad pillar, inscription No. 2, all of which re-appear on these early Kanouj coins. In a subsequent paper I shall produce equally convincing evidence that those of the Benares and Delhi inscriptions are reproduced upon a second series of Kanouj coins of a much more modern character.

All then that can be now attempted is, to recapitulate the names

that have been brought to light in the present investigation, names for which we are indebted to the joint contributions of not less than a dozen friends\*, leaving the proper arrangement of them to a more advanced stage of our knowledge than we at present possess.

The following are the names and titles that appear on the coins of the two last plates.

1. *Sri Aparājita dhvaja Kumāragupta parākrama.*
2. *Sri Vikrama Chandra.*
3. *A'pattī rurhah, or Bhupati rurha.*
4. *Kragipta paragu (pta.)*
5. *Chandragupta.*
6. *Māharāja adhi rāja Sri .... Sri pradyu Vikrama.*
7. *Sri Vikrama Narendra gupta.*
8. *Mahārāja adhi rāja Sri Samudragupta.*
9. *.. Srī bal vikrama Kumāragupta.....*
10. *Ajita mañatrigupta*
11. *Asvamedha parākrama.*

To these may be added the

12. *Vikramāditya* of MARSDEN's collection, and the
13. *Sasi-gupta*, of Prof. WILSON's plates.

[To be continued.]

---

IV.—*Application of Iron Rods, proposed to compensate for the strain occasioned by the tension of the strings upon Piano Fortes, thereby to prevent warping, and to render them more durable and better adapted to keep longer in tune. By Col. D. PRESGRAVE.*

By a notice in your Journal, No. 17, May 1833, of some improvements that had been made in square piano-fortes, I am induced to send an account of a scheme, which I devised and put in practice in January, 1833. The object of which is to strengthen the instrument, so as to prevent warping or twisting, thereby rendering it more lasting and less liable to get out of tune.

It is stated in the above-quoted article, that it is by the slipping of the round iron pegs in their wooden sockets, that a piano gets out of tune; but I am inclined to think, that this is not to be attributed so much to that circumstance, as to other causes, such as change in the level of the instrument by the unceasing strain or tension upon it; the effect of temperature on the wires, and of the atmosphere on the porous material (wood) of which the instrument is constructed. Whilst pianos are very new, they require comparatively little tuning;

\* VENTURA, KERA'MAT ALI, WADE, TREGEAR, CUNNINGHAM, BURT, STACY, WATSON, SMITH, SWINEY, CRACROFT, and CONOLLY.

but as they increase in age, so do they, in consequence of progressive warping, require it the oftener.

The constant tension of the strings effects such a strain upon the piano, that the opposite corners (in the direction of the wires) of almost every one, however new, will be found, if accurately examined, to be turned up more or less. Thus it will be easy to conceive, that so long as the *bed* retains inflexibly its straight or level form, the piano will last, possessing the property of remaining *longer* in tune, and of being more easily tuned: but let the strings once gain an ascendancy over the horizontal level of the bed, and the turning up thereof will proceed with accelerated speed.

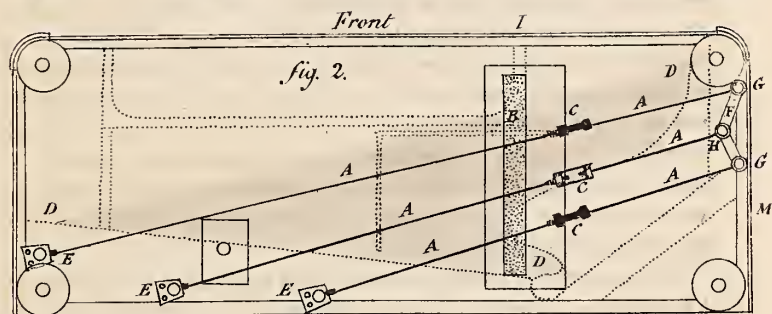
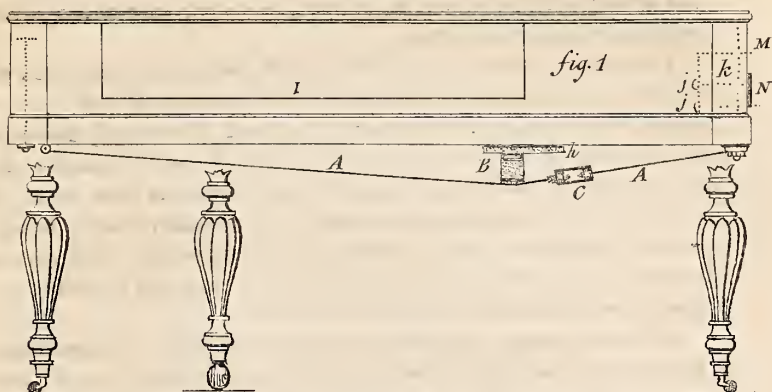
In Calcutta, where people enjoy the means, and have the opportunity, they do not keep their pianos beyond a year, but pay for an annual exchange; thus getting rid of them before the warping gives annoyance, and is not so great as to render them unsaleable; but it is not so with people situated away from the metropolis, who are compelled to take whatever pianos are sent them, which they are doomed to use for years, until they may be seen with two inches and even more, turn up: in this state many are quite unconscious of the defects of their pianos, and attribute their not remaining in tune to climate, to want of skill in the tuner, or to any other cause, rather than to the deplorable state of the instrument.

To prevent this warping, several plans (and patents I believe) have been adopted by makers. Some of them consist in the application, in various ways, of plates and bars inserted at the back, and in the inside of the piano. One of the plans adopted is, that of a square iron bar, about three and a half feet in length, and upwards of 15 lbs. in weight, screwed (in the direction of the wires) to the underside of the piano, with five *wood-screws*, scarcely weighing three drachms each, and a slight bolt, to connect the end of the bar, by means of a nut and screw to the end of the piano; indeed, if this bar were even more substantially fixed to the instrument, it does not appear to me calculated to be of any material service in strengthening it.

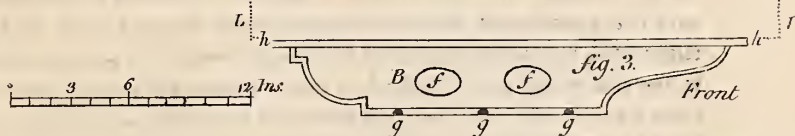
In January, 1833, I took to pieces an old piano belonging to a friend, with the intention of trying to straighten it. During this operation, whilst reflecting on the immense pull that the wires constantly exert beyond all power of the bed, as at present constructed, of any piano to resist; it occurred to me, that if a counter strain to the wires *above* could be contrived and attached to the opposite or *underside* of the bed, the desired object of keeping the piano straight, thereby rendering it far more durable, and disposed to keep longer in tune, would be accomplished.



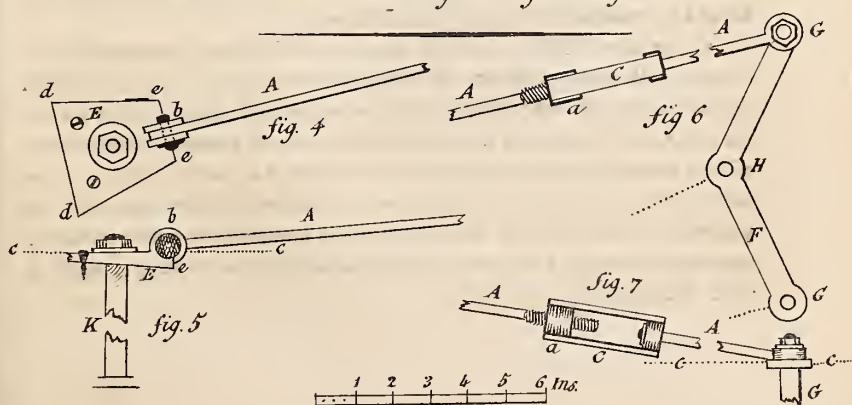
*Presgrave's Compensation Rods, for Piano Fortes*



*Ins. 12 6 0 1 2 3 Feet*



*3 6 12 Ins.*





The compensation for the strain of the wires *above* is effected by placing iron rods (two or three) in a direction parallel with the strings, but *below* the bed of the instrument. The rods are fixed at their extremities by a joint, to iron clamps, which are screwed to the underside of the bed, and bolted at one end of the piano, through the bed and block that holds the tuning pegs, and at the other, through the bed, block, and plank. The extremities of the rods being thus *fixed*, their power is obtained by drawing them over a stout wooden bridge, placed at about two feet from the end, just below the keys of the highest notes, and then drawn by adjusting frame, nuts, and screws, as tight as is necessary; as will, I hope, be distinctly shewn by the accompanying plate and description.

Fig. 1, is an elevation of a piano, which shews one of the rods, A, as applied below, drawn by the adjusting screw C tight over the bridge B. (The same letters apply to all the figures.) The bridge B is shewn on a larger scale at fig. 3. By the drawing, fig. 1, the end of the bridge B seems to present an unsightly appearance, but it is not so in reality; the rods crossing the bridge, at some distance from the front, as at I in figs. 2 and 3; and so little are they visible, that they would not be observed, unless attention was drawn towards them.

The frame or adjusting nut C turns at one end on a knob or head, formed on the end of the (short) rod, having a flat brass ring interposed (to reduce the friction) between its head and the inside bearing of the frame: the other end of the frame is made *thick*, as at figures 6 and 7, having a screw formed within it, to receive that on the end of the rod. The screws are raised *above* the surface, and not cut into the thickness of the rods.

Fig. 2, represents the piano, turned upside down. A A A are the rods, running in the same direction with the strings of the piano, intended to be expressed by the shaded part between D D D.

E E E, clamps with joints *b*, figs. 4 and 5, to receive the ends of the rods, in which they are held by a small bolt. The clamps are sunk in the wood, as shewn by the dotted line *c c*, are *broader* towards their outer ends, *d d*, and *thicker* towards *e e*, that they may oppose more surface in the wood, against the tension or drag of the rods A.—F. figs. 2 and 6, is a clamp of another description, (it was applied to one of the pianos operated upon;) by it the bolts fixing the ends of the three rods are connected: the two outer bolts GG, passing through the end plank of the piano, and the centre one, H, through the bed, block, and metal plate, on which the wires are fixed; instead of thus connecting the ends of the rods by one clamp, separate clamps like EE, figs. 4 and 5 have been used: the clamps EEE, besides

V.—*Notice of two beds of Coal discovered by Captain J. R. OUSELEY, P. A. to the Commissioner at Hoshangabad, near Bara Garahwára, in the Valley of the Narbada, 5th Jan. 1835. Pl. LIII.*

Hearing of black stones being found near *Mohpáni*, seven or eight miles from *Chicheli*, and 12 or 14 from *Garahwára* proper, on the *Sakar*, I went there, and found, as they described, black stones; but placing them on the fire, they did not burn. They are in strata of 10 feet to 15 feet thick, solid masses, perpendicular, (strata,) as if thrown up by some convulsion of nature, intermixed with strata of grey yellow and brown sandstone, mica-looking grit, (vide A, plan of coal bed,) and marl, on the left bank of the *Síta Rewa*, which flows along the bottom. I proceeded up the bed of this nalla for about two miles, when I came upon what appears to me to be a very fine bed of coal.

The river *Síta Rewa*, flowing from the south, here emerges from the hills at the N. E. angle of *Nimbuagarh*, a name given to one of the hills within half a mile of the coal bed. The current has uncovered for 100 yards the coal: its thickness is unknown as yet; that exposed, being about 14 feet thick. After so many attempts at discovering coal, which only proved to be mere seams of anthracite, I felt much gratified at discovering so large a bed. The road by which I proceeded up and along the river, I found very bad; but I returned by a most excellent one, being that used by the villagers for bringing wood from the jungles: the whole way being a plain, and practicable for any kind of carriage.

At the junction of the *Hard* and *Sakar* rivers, I also discovered a bed of coal, seemingly of as good quality: the seam about three feet thick; but on account of the magnitude of the other bed, this became an object of less inquiry. I ascertained also that limestone and iron ore were in abundance.

VI.—*Specific name and character of a new species of Cervus, discovered by B. H. HODGSON, Esq. in 1825, and indicated in his Catalogue by the local name of Bahraiya.*

In the catalogue of the Mammalia of Nipal, a new species of *Cervus* is designated by the local name of *Bahraiya*, and it is therein remarked, that the species forms, with *C. Wallichii*, a chain of connexion between the Elaphine and Rusan groups. The horns, which at once fix the specific character and its novelty, were sometime back given in the journal. But these notices having failed to fix attention, and the animal in question being still confounded with the *Saumer*, *Jerow*, or *Jarái*, it may be as well to define the species more precisely, and to give it a scientific name.

Genus—*CERVUS*. Sub-Genus *Elaphus*, (English Regne Anim.) *Cervus Elaphoides*. Stag-like deer, mihi.

C. *El.* brown-red deer, with moderate-sized, stout, pale horns, branched at the summits, as in *Elaphus*; but with no bezantler, and only one browantler to each beam. In stature and aspect, mediate between *Hippelaphus* and *Elaphus*. Icon penes nos. *Bahraiya* of the Cat. Nip. Mam., called *Máha* in the Western Tarai.



Sketch of Nimbuagarh Coal Bed - Nerbada Valley.

Fig. 1.

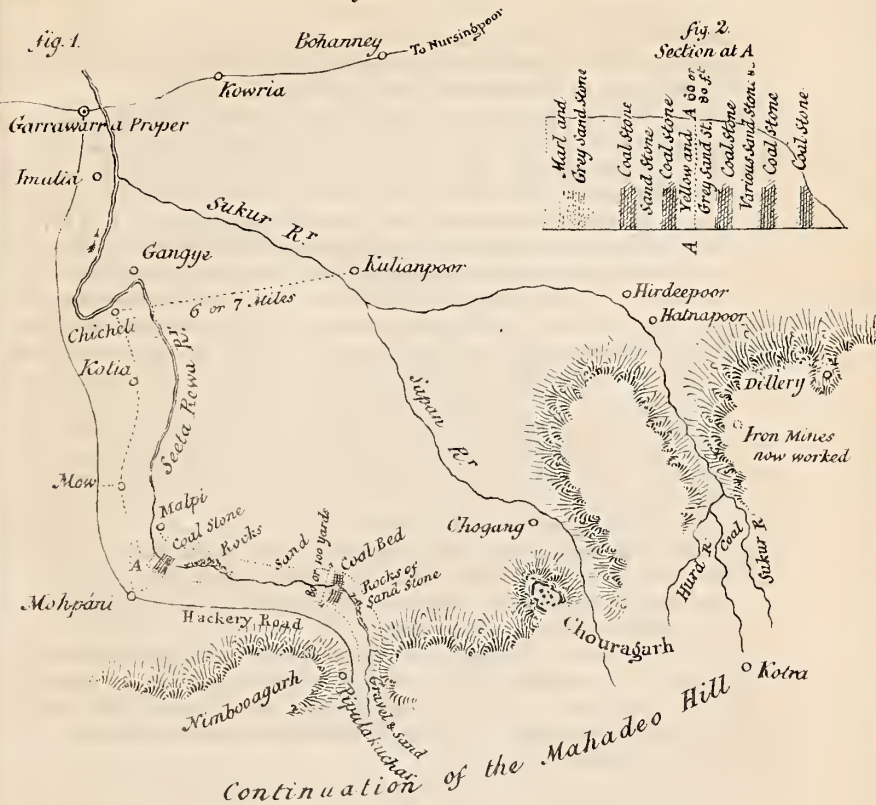
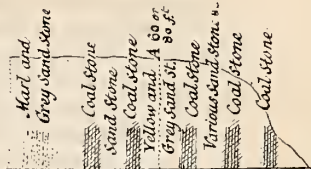


Fig. 2.

Section at A



Horns

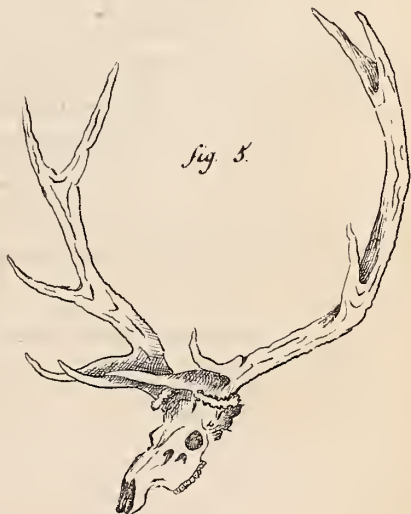
Fig. 3.



Fig. 4.



Fig. 5.





*Remarks.*—The horns of this animal differ from those of any known species. In size, curvature, and thickness, they agree with those of the *Hippelaphus* of DU VAUCEL and of CUVIER: and are considerably less large than those of *Elaphus*. But in colour and rugosity, they depart from the former, to approach the latter, with which they have, besides, a strict correspondence in the numerous snags crowning their summits, and also in the *anteal* insertion and *forward* direction of the browantler. The absence of the median process, and the singleness of the basal one, are points of similitude with the Hippelaphine or Rusan group, in which, however, the basal or browantler has always an *oblique* insertion and *upward* direction.

WALLICH's deer, again, has *two* browantlers directed forwards; but has only a *single superior* process from the beam; and it is almost deprived of tail, whilst that member is more developed in the Rusan than in the Elaphine group. The dark and shaggy coat of the Rusans is not traceable in *Wallichii*, which is even paler than the European red deer. In these respects, our animal more nearly than *Wallichii* approaches the European stag; but in the singleness of his browantler, he recedes further from the European type than does *Wallichii*. He serves, in all respects, to form a fresh and striking link of connexion between the Hippelaphine and Elaphine groups, which groups, H. SMITH supposes to be respectively the Asiatic and European types of *Cervus*. The *first* discovered link in this connexion was WALLICH's deer. *Elaphoïdes*, (mihi,) constitutes *another*, equally distinct and remarkable. In the synoptical arrangement of the English Regne animal, *Elaphoïdes* must have a place immediately after or before *C. Wallichii*; with which species our's will serve to smooth the transition from *Elaphus* to *Rusa*. The crowned summits of the horns, each of which bears four or five processes, inclusive of the point of the beam, at once distinguishes *Elaphoïdes* from the Jerows, Jaráís, or Saumers of the continent and islands of India. All the latter belong to the Rusan group, and in their manners are remarkable for exclusive adherence to the heaviest forest jungle, whence they frequently penetrate into the proximate mountains or hills. On the contrary, *Elaphoïdes* (the *Bahraiya* or *Mahá*) never was known to enter the mountains; nor does he, save casually, resort to the depths of the forests. His lair is on the *skirts* of large forests, amid the grassy and swampy glades which abound in such vicinities. Lastly, his female is of a whitey-brown or pale dun hue: whereas the females of the Rusans are dark-hued, as the males.

### *Explanation of Plate LIII.*

Fig. 3. *Cervus Elaphus*, Nipalese Sál forest: vulgo, *Bára Sinha*, type of *Cervus*.

Fig. 4. *Cervus Elaphoïdes*, mihi: vulgo, *Bahraiya* and *Mahá*, Nipalese and Western Taraís; osculant.

Fig. 5. *Cervus Hippelaphus*: type of *Rusa*.

*Note.*—All three heads on an uniform scale. The stag's horns shew the two basal processes, and the median on either beam; but the terminal crown of snags is not developed, owing to youth. Each horn has but one superior process from the beam, instead of three or four.

VII.—*Proceedings of the Asiatic Society.**Wednesday Evening, the 2nd December, 1835.*

The Rev. W. H. MILL, D. D. Vice-President, in the chair.

His Excellency Sir HENRY FANE, Commander-in-Chief, and Mr. CHARLES AUGUSTUS NOTT, proposed at the last meeting, were ballotted for, and duly elected members.

Read letters from Colonel W. H. SYKES, and Professor W. BUCKLAND, acknowledging their election as honorary members.

Read letters from H. HARKNESS, Esq. Secretary to the Royal Asiatic Society, and NICHOLAS CARLISLE, Esq. Secretary to the Society of Antiquaries, acknowledging the receipt of copies of Mr. CSOMA's Tibetan Grammar and Dictionary.

Read a letter from Dr. LAUTARD, Secretary to the Royal Academy of Marseilles, proposing an interchange of publications, and inclosing a diploma of honorary membership for the Secretary of the Asiatic Society; also presenting two volumes of the "*Histoire de l'Academie de Marseilles*."

*Resolved*, that copies of the Researches be sent in return to Marseilles.

The recent change in the currency of the Bengal currency, having been brought under consideration by the Secretary, it was

*Resolved*, that from the 1st January, 1836, all quarterly subscriptions and fees of admission to the Society, be collected in the new rupee; viz. 32 Company's rupees for the admission fee; 16 Co.'s Rs. for the quarterly subscription of ordinary members; and 4 Co.'s Rs. for the yearly subscription of Associate Members.

Mr. CSOMA DE KÖRÖS, in a letter to the Secretary, intimated his intention of quitting Calcutta for the Western Provinces, and requested the loan of some Sanscrit books, which was granted.

*Library.*

Read a letter from M. ROUY DE ROCHELLE, President of the Central Committee of the Geographical Society of Paris, forwarding a copy of *Bulletin de la Société de Géographie*, vols. 1st and 2nd.

The following books were presented on the part of Lieut.-Col. W. H. SYKES, the Author.

A Catalogue of the Mammalia and Birds, observed in Dukhun.

On the Atmospheric Tides and Meteorology of Dukhun.

Description of the Wild Dog of the Western Ghats.

Some account of the Kolisura Silk-worm of the Dukhun.

Proceedings of the Statistical Society of London, No. I. vol. 1st.

The following works by Sir J. F. W. HERSCHEL.

A list of Test Objects, principally Double Stars.

Notices on the Orbits of revolving Double Stars.

Micrometrical measures of ditto.

On the Satellites of Uranus, and Observations of BIELA's Comet.

Also:—

The Indian Journal of Medical Science, No. 24—*by the Editors.*

Two copies of Impression of the Orrery and Simple Illustrations of Eclipses, translated into Bengali by Mähā Rājāh KALIKISSEN—*by the Author.*



Meteorological Register for October, 1835—*by the Surveyor General.*

DUMOULIN'S Gulistan, 1807, and Karab-ud-din, a Medical work, MS. were presented—*by Professor H. H. Wilson.*

The following books received from the booksellers :

LARDNER'S Cabinet Cyclopaedia—Germanic Empire, vol. 3rd.

Ditto ditto—Greece, vol. 1st.

*Literary and Antiquities.*

Read a letter from W. H. WATHEN, Esq. forwarding a memoir on Chinese Tartary and Khoten.

[This will be published in our next.]

The Hon'ble Lieut.-Col. MORRISON, presented, on the part of the Author, a paper on the State of Arts of the Cotton Spinning, Printing, and Dyeing in Nepal, by Dr. A. CAMPBELL ; with specimens.

Read a letter from Capt. T. J. TAYLOR, forwarding extract from a Journal of the late Major WARD, of the Madras European Regiment, regarding the inhabitants of the Varshagiri mountains in the Peninsula.

Read a letter from Lieut. H. ABBOTT, Mhow, forwarding an essay upon Comets, containing a new theory of the phenomena of the coma.

Read a letter from G. W. TRAILL, Esq. forwarding copy of an inscription in the nail-headed form of Sanscrit in Kemaon.

Read extracts of a letter from Dr. BENZA, on the subject of some ancient coins dug up in a 'cairn' on the *Nilgiris*.

From Lieut. A. CUNNINGHAM, at Benares, were received several very beautifully sculptured small Buddha images, discovered in the excavations at *Sárnáth* ; also copies of various inscriptions, and impressions of coins.

*Physical.*

The Secretary announced the arrival of six chests of fossil bones from the *sub-Himálayas*, forming the first dispatch of Colonel J. COLVIN'S munificent donation promised on the 14th January, 1835. (see page 56.)

In this collection, which Colonel COLVIN'S letter describes as containing the fossils in their rough matrix, as they were brought down by the native workmen employed in their excavation, a cursory inspection shewed several very large and complete jaws of the elephant, mastodon, hippopotamus, crocodile, and of other animals not immediately recognized. Col. COLVIN'S letter of the 4th October, intimated the further dispatch of seven chests of fossils, more carefully selected and classified, of which a full catalogue has been furnished by the indefatigable collectors at Dádúpur.

[We postpone our account of the whole until the second dispatch arrives.]

Specimens of a crustaceous animal taken from the Greenland Whale, presented by Mr. STEPHENSON, with an explanatory note.

A specimen of *Lophophorus Impeyanus*, by Mr. C. W. SMITH.

A collection of bones of various mammalia, by Mr. J. T. PEARSON.

Specimens of the soil and strata of the bed of the *Sámar* lake, and of the salt in its different stages of formation, were presented by Capt. A. CONOLLY, Assistant Resident *Jaipur*.

A note of their chemical analysis by Mr. STEPHENSON, and the Secretary, was at the same time submitted.

*Meteorological Register, kept at the Assay Office, Calcutta, for the Month of November, 1835.*

| Day of the Month. | Observations at 10 A. M.    |                        |                     |                     |                         |                        |                  |                     |                        |                     | Observations at 4 P. M. |                         |                        |                  |               |              |       |          |                                |         | Register Thermometer Extremes. |           | Wind. |  | Weather. |  |
|-------------------|-----------------------------|------------------------|---------------------|---------------------|-------------------------|------------------------|------------------|---------------------|------------------------|---------------------|-------------------------|-------------------------|------------------------|------------------|---------------|--------------|-------|----------|--------------------------------|---------|--------------------------------|-----------|-------|--|----------|--|
|                   | Standard Barometer, at 32°. | Wet Barometer, at 32°. | Ags. Tern. deduced. | Thermometer in air. | Diff. or M. T. Depress. | Leslie's Diff. Hygrom. | Hair Hygrometer. | Standard Barometer. | Wet Barometer, at 32°. | Ags. Tern. deduced. | Thermometer in air.     | Diff. or M. T. Depress. | Leslie's Diff. Hygrom. | Hair Hygrometer. | Cold on roof. | Heat in sun. | Rain. | Morning. | 10 A. M.                       | 4 P. M. | Day-light.                     |           |       |  |          |  |
| 1                 | 29.918                      | 80.6                   | 79.5                | 79.5                | 12.8                    | 8.3                    | 82               | 896                 | 716                    | 1,110               | 82.5                    | 9.1                     | 8.4                    | 84               | 70.2          | 129          |       | N.       | ne.                            | NW.     | clear.                         | fine.     |       |  |          |  |
| 2                 | 89.4                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 16.6                    | 8.5                    | 87               | 69.5          | 127.2        |       | N.       | ne.                            | NW.     | do                             | clear.    |       |  |          |  |
| 3                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 8.5                     | 7.7                    | 87               | 72.2          | 123.2        |       | N.       | se.                            | ne.     | do                             | mist.     |       |  |          |  |
| 4                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 4.4                     | 4.6                    | 87               | 74.5          | 84.0         |       | E.       | se.                            | se.     | hazy.                          | dull.     |       |  |          |  |
| 5                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 8.5                     | 8.5                    | 87               | 71.5          | 80.0         |       | ne.      | ne.                            | ne.     | rain.                          | do        |       |  |          |  |
| 6                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 4.2                     | 3.5                    | 98               | 71.5          | 80.0         |       | ne.      | ne.                            | ne.     | hazy.                          | overcast. |       |  |          |  |
| 7                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 3.9                     | 3.4                    | 98               | 71.5          | 101.3        |       | ne.      | ne.                            | ne.     | do                             | showery.  |       |  |          |  |
| 8                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 2.8                     | 2.8                    | 100              | 68.2          | 75.2         |       | N.       | mne.                           | mne.    | cloudy.                        | cumuli.   |       |  |          |  |
| 9                 | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 11.2                    | 11.2                   | 100              | 67.2          | 117.5        |       | N.       | n.                             | n.      | clear.                         | fine.     |       |  |          |  |
| 10                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 10.8                    | 10.8                   | 100              | 67.2          | 115.4        |       | nw.      | NW.                            | nw.     | clear.                         | do        |       |  |          |  |
| 11                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 6.9                     | 10.0                   | 76               | 63.2          | 122.4        |       | nw.      | NW.                            | nw.     | fair.                          | do        |       |  |          |  |
| 12                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 16.0                    | 14.5                   | 62               | 61.5          | 118.0        |       | nw.      | NW.                            | nw.     | do                             | do        |       |  |          |  |
| 13                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.7                     | 8.5                    | 87               | 59.5          | 114.0        |       | NW.      | NW.                            | nw.     | do                             | do        |       |  |          |  |
| 14                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.5                     | 8.5                    | 87               | 62.1          | 83.0         |       | n.       | nw.                            | nw.     | do                             | do        |       |  |          |  |
| 15                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.1                     | 9.1                    | 87               | 62.1          | 87.0         |       | NW.      | NW.                            | n.      | clear.                         | cumuli.   |       |  |          |  |
| 16                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 10.8                    | 9.0                    | 82               | 62.5          | 90.2         |       | N.       | n.                             | n.      | do                             | do        |       |  |          |  |
| 17                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 8.9                     | 7.8                    | 85               | 63.2          | 89.2         |       | n.       | nw.                            | nw.     | do                             | fine.     |       |  |          |  |
| 18                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 10.0                    | 8.6                    | 81               | 62.0          | 88.4         |       | o.       | nw.                            | n.      | clear.                         | do        |       |  |          |  |
| 19                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.2                     | 7.8                    | 83               | 61.5          | 86.7         |       | o.       | n.                             | N.      | do                             | do        |       |  |          |  |
| 20                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 12.7                    | 7.7                    | 76               | 60.4          | 89.0         |       | o.       | N.                             | N.      | fog.                           | cirri.    |       |  |          |  |
| 21                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 10.9                    | 10.7                   | 76               | 60.4          | 89.0         |       | o.       | N.                             | N.      | do                             | clear.    |       |  |          |  |
| 22                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 13.7                    | 10.3                   | 75               | 60.5          | 83.8         |       | o.       | n.                             | n.      | do                             | fine.     |       |  |          |  |
| 23                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 11.1                    | 10.3                   | 75               | 54.2          | 83.8         |       | o.       | n.                             | n.      | do                             | clear.    |       |  |          |  |
| 24                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 11.2                    | 10.0                   | 80               | 54.2          | 83.8         |       | o.       | N.                             | nw.     | do                             | do        |       |  |          |  |
| 25                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 10.5                    | 10.0                   | 79               | 57.2          | 90.3         |       | o.       | NW.                            | n.      | do                             | do        |       |  |          |  |
| 26                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.8                     | 9.0                    | 80               | 53.7          | 87.8         |       | n.       | n.                             | n.      | do                             | do        |       |  |          |  |
| 27                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 11.0                    | 10.4                   | 78               | 53.0          | 88.0         |       | n.       | n.                             | nw.     | do                             | do        |       |  |          |  |
| 28                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 11.2                    | 10.4                   | 78               | 57.2          | 85.5         |       | sw.      | n.                             | nw.     | do                             | do        |       |  |          |  |
| 29                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 9.3                     | 9.0                    | 81               | 54.8          | 88.8         |       | n.       | n.                             | n.      | do                             | do        |       |  |          |  |
| 30                | 89.6                        | 887                    | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,110               | 82.5                    | 7.3                     | 9.0                    | 81               | 54.8          | 88.8         |       | nw.      | n.                             | n.      | do                             | do        |       |  |          |  |
| Mean              | 29.925                      | 86.9                   | 80.8                | 80.8                | 8.4                     | 7.6                    | 87               | 814                 | 716                    | 1,096               | 77.9                    | 10.0                    | 8.5                    | 83               | 62.7          | 96.8         | 3.14  | North.   | One storm, then fine and cold. |         |                                |           |       |  |          |  |

On the 14th instant the Register Thermometer was removed from the top of a house in Calcutta, to Chowringhee; where it was placed in a garden 2 feet from the ground, near a tank. On this account it did not range so high in the day. A new correction—°.20 is also applied to the Barometer on Sundays, now placed on the second story.

On the 14th instant the Register Thermometer was removed from the top of a house in Calcutta, to Chowringhee; where it was placed in a garden 2 feet from the ground, near a tank. On this account it did not range so high in the day. A new correction—'.20 is also applied to the Barometer on Sundays, now placed on the second story.



